

01

Thyristors and Triacs

#Selection Guide
选型手册

2026 WeEn Semiconductors

All rights reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use. Publication thereof does not convey nor imply any license under patent- or other industrial or intellectual property rights.

Date of release: March, 2026

Document order number: 20260301



Follow us on WeChat



Follow us on LinkedIn



2026





WeEn
WeEn Semiconductors

Power Efficiency
for A Cooler Planet

01

Thyristors

AC THYRISTOR TRIACS

AC THYRISTORS

TEMPERATURE AND OVERLOAD
PROTECTED TRIACS (TOPTriac)

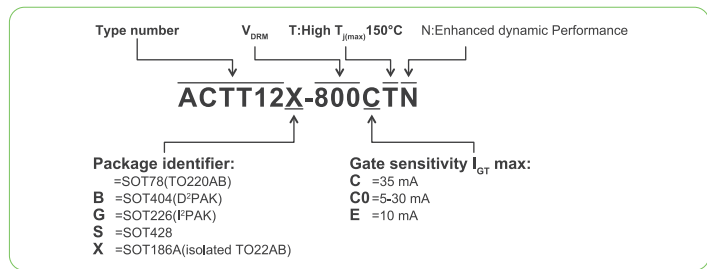
THREE-QUADRANT Hi-Com TRIACS

FOUR-QUADRANT TRIACS

SILICON CONTROLLED RECTIFIERS

SILICON CONTROLLED RECTIFIER
POWER MODULES

AC Thyristor Triacs part numbering



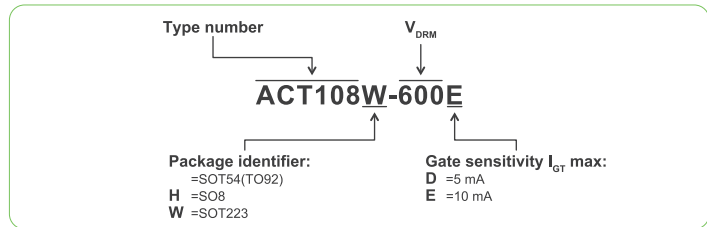
In the spotlight

AC Thyristor Triacs ACTT10 series, ACTT12 series

- Planar passivated with overvoltage clamping function
- High energy surge handling
- Very high dV_G/dt for maximum immunity to false triggering
- High T_J (max) to 150°C



AC Thyristors part numbering



In the spotlight

AC Thyristors ACT108-800E, ACT108W-800E

- Planar passivated with overvoltage clamping function
- Working voltage increased to 800V
- Enhanced overvoltage clamping capability
- High false trigger immunity



In the spotlight

TOPTriac TOPT12, TOPT16

- Planar passivated for voltage ruggedness & reliability
- Over temperature & over load protection
- No need to over-specify triac and heatsink
- Avoid loss of control at high temperature
- Status monitoring with help of microcontroller



AC THYRISTOR TRIACS

3Q Hi-Com power switches, overvoltage protection

Types in **bold blue** represent new products
Types in **bold red italic** represent products in development
N: enhanced Noise immunity T: high $T_{j(max)}$ 150°C

I_{GT} key:
C 35mA
C0 5-30mA
E 10mA

$I_{T(RMS)}$ (A)	V_{DRM} (V)	I_{GT} (max) (mA)	SOT223 SC-73	TO-252 SOT428 DPAK	TO-263 SOT404 D ² PAK	TO-262 SOT226A I ² PAK	TO-220 SOT78	TO-220F SOT186A SC-67
2	800	E ETN C/E	ACTT2W	ACTT2S ACTT2S ACTT4S				ACTT2X ACTT2X ACTT4X
4	800	CTN/ETN E CN		ACTT4S ACTT6S				
6	800	CTN C0/C0T		ACTT6S	ACTT6B ACTT6B	ACTT6G	ACTT6 ACTT6	ACTT6X ACTT6X
8	800	CTN C/CT			ACTT8B ACTT8B		ACTT8 ACTT8	ACTT8X ACTT8X
10	800	CTN			ACTT10B ACTT12B		ACTT10 ACTT12	ACTT10X ACTT12X
12	800	CTN		ACTT12S	ACTT12B		ACTT12	ACTT12X
16	800	CTN			ACTT16B		ACTT16	ACTT16X

AC THYRISTORS

2Q Hi-Com power switches, exclusive negative gate triggering, common mounting base, overvoltage protection

Types in **bold blue** represent new products
Types in **bold red italic** represent products in development

I_{GT} key:
D 5mA
E 10mA

$I_{T(RMS)}$ (A)	V_{DRM} (V)	I_{GT} (max) (mA)	MS-012 SOT96-1 SO8	SOT223 SC-73	SOT223-2L	TO-252 SOT428 DPAK	TO-92 SOT54
0.2	600	D	ACT102H				
0.8	600 800	D/E E		ACT108W ACT108W			ACT108 ACT108
1	600 800	E E		ACT110W ACT110W	ACT110V		ACT110
2	800	ET				ACT120S	

TEMPERATURE AND OVERLOAD PROTECTED TRIACS (TOPTriac)

2Q Hi-Com power switches, exclusive negative gate triggering, over-temperature protection

Types in **bold blue** represent new products
Types in **bold red italic** represent products in development

I_{GT} key:
C0 5-35mA

$I_{T(RMS)}$ (A)	V_{DRM} (V) BTA330Y	I_{GT} (max) (mA)	TO-263 SOT404 D ² PAK	TO-220 SOT78
12	800	C0		TOPT12
16	800	C0	TOPT16B	TOPT16

A	75mA	D	5mA
B	50mA	E	10mA
B0	10 - 50mA	F	25mA
C	35mA	F0	5 - 20mA
C0	5 - 35mA		

Type number V_{DDM} T_{High} T_{max} 150°C
 R:ACT pinning
BTA312B-600CT N-Enhanced dynamic performance
 Gate Sensitivity I_{GT} max:
 B = 50mA D = 15mA
 B0 = 10-50mA E = 10mA
 C = 35mA F = 25mA
 C0 = 5-35mA F0 = 5-20mA
 Package identifier:
 B = SOT478(TO222AB) S = SOT428(DPAK)
 B = SOT404(DPAK) W = SOT223
 X = SOT186A(isolated TO22AB)
 Y = SOT780(internally insulated TO22AB)

3Q Hi-Com Triacs BTA425, BTA330, BTA440, BTA445

Planar passivated for voltage ruggedness and reliability
High junction operating temperature(150 °C)
Less sensitive gate for high noise immunity
High commutation, high dV/dt for maximum immunity to false triggering



I _{T(RMS)} (A)	V _{DRM} (V)	I _{GT} (max) (mA)	SOT223 SC-73	SOT223-2L	PDFN5x6	TO-252 SOT428 DPAK	TO-263 SOT404 D ² PAK	TO-92 SOT54	TO-262 SOT226A I ² PAK	TO-220 SOT78	TO-220 Ins SOT78D	TO-220F SOT186A SC-67	TO-3P Ins SOT1292	TO-3PF	TO-247 SOT429	
																
0.8	600 / 800	D D/E	BTA2008W					BTA2008								
	1000	D DN						BTA2008 BTA2008 BTA2008								
1	600 / 800	B/E/ER						BTA201								
	600	E B/C/D/E/F	BTA201W BTA204W*													
	800	C/E	BTA204W*													
	1000	D/ET D/ET	BTA301W	BTA301V BTA301V			BTA301 BTA301									
2	600 / 800	D/E										BTA202X				
	800	ET	BTA302W BTA202W	BTA302V			BTA302									
	1000	CT/ET D/ET	BTA202W				BTA202 BTA302 BTA203					BTA202X				
3	800	CT/ET		BTA302V												
4	600	B/C/D/E/F				BTA204S BTA204S				BTA204 BTA204		BTA204X BTA204X				
	800	B/C/E ET	BTA304W	BTA304V BTA404V		BTA304S BTA404S BTA204S										
	1000	CT/ET C				BTA206S						BTA204X				
6	800	CT														
8	600	CT/ET BT D				BTA208S BTA208S BTA208S					BTA206 BTA208 BTA208		BTA206X BTA208X BTA208X BTA208X BTA508X BTA308X			
	800	B/E/F				BTA508S				BTA508S	BTA508Y					
		CT														
		B0/C0/F0 B0T C0T ET					BTA308S BTA308S	BTA308B BTA308B			BTA308 BTA308 BTA308	BTA308Y BTA308Y	BTA308X BTA208X BTA208X BTA408X* BTA310X BTA410X*			
		B/C0/C0T						BTA208B								
	1000	C C0T C/D/E BT/CT/ET								BTA310 BTA410* BTA312 BTA312 BTA312	BTA410Y*					
	12	600	CT D					BTA312B BTA312B BTA312B	BTA312G					BTA312X BTA312X		
		600 / 800	B/C/E C B/C/ET BT									BTA312Y BTA412Y*				
800			ET B0/BT CT D/ET B/C/E B/C B0 BT/CT BT/CT		BTA312V	BTA512S	BTA312B BTA512S BTA312B BTA316B BTA316B			BTA312 BTA312 BTA512 BTA312Y BTA312 BTA316 BTA316	BTA512Y BTA312Y	BTA312X BTA512X				
16		600	ET B0/BT CT D/ET B/C/E B/C B0 BT/CT BT/CT													
	600 / 800	B/C/E B/C B0 BT/CT BT/CT								BTA316 BTA316 BTA316	BTA416Y* BTA316Y	BTA316X BTA316X				
		800	CT				BTA316S BTA516S	BTA416B* BTA516B		BTA416* BTA316 BTA516 BTA316	BTA516Y BTA316Y	BTA416X* BTA316X BTA516X		BTA425J*		
		20	ET BT BT/CT					BTA420B			BTA420* BTA225 BTA325 BTA225	BTA420Y*	BTA420X*			
	25	600	BT BT													
		600 / 800	B BT BT BT					BTA225B BTA325B BTA325B			BTA325	BTA325Y	BTA325X BTA425X*		BTA425J*	
BT/CT											BTA425Y* BTA330Y		BTA425Z*			
30	800	BT/CT					BTA330B			BTA330		BTA330X				
40	800 1200	BT AT											BTA440Z BTA440Z	BTA440J BTA440J	BTA440W	
45	800	BT											BTA445Z			
50	800	BT											BTA450Z			
80	800	BT											BTA580Z			

SILICON CONTROLLED RECTIFIERS

Types in **bold blue** represent new products

Types in ***bold red italic*** represent products in development

-A: Automotive qualified AEC-Q101 F: Fast switching

(R): Reverse pinning T: high T_j max 150°C * High I_{TSM}

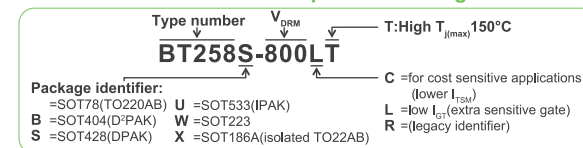
N: enhanced Noise immunity

I_{GT} key:

A	75mA
B	50mA
B0	10 - 50mA
C	35mA
C0	5 - 35mA

D	5mA
E	10mA
F	25mA
F0	5 - 20mA

Silicon Controlled Rectifiers part numbering



In the spotlight

High Voltage, high surge capability SCR BT155 series, BT158, TYN60

Planar passivated for voltage ruggedness and reliability

High junction operating temperature capability (T_{jmax} 150°C)

Less sensitive gate for high noise immunity

[illegible]

SILICON CONTROLLED RECTIFIERS

Types in **bold blue** represent new products
Types in **bold red italic** represent products in development
-A: Automotive qualified AEC-Q101 F: Fast switching L: Lower I_{GT} N: enhanced Noise immunity
(R): Reverse pinning T: high T_jmax 150°C * High I_{TSM}

I_{GT} key:

A	75mA	D	5mA
B	50mA	E	10mA
B0	10 - 50mA	F	25mA
C	35mA	F0	5 - 20mA
C0	5 - 35mA		

Silicon Controlled Rectifiers part numbering

Type number

BT258S-800LT

V_{DRM}

T:High T_j(max) 150°C

Package identifier:

=SOT78(TO220AB)

=SOT533(IPAK)

=SOT404(D²PAK)

=SOT428(DPAK)

U

W

X

=SOT533(IPAK)

=SOT223

=SOT186A(isolated TO22AB)

C

L

R

=for cost sensitive applications (lower I_{TSM})

=low I_{GT} (extra sensitive gate)

=(legacy identifier)

In the spotlight

High Voltage, high surge capability SCR BT155 series, BT158, TYN60

Planar passivated for voltage ruggedness and reliability

High junction operating temperature capability (T_jmax 150°C)

Less sensitive gate for high noise immunity

I _{T(RMS)} (A)	I _{T(AV)} (A)	V _{DRM} & V _{RRM} (V)	I _{GT} (max) (mA)	SOT23(L)	TO-243 SOT89	SOT223 SC-73	TO-252 SOT428 DPAK	TO-263 SOT404 D ² PAK	TO-263-2L	TO-92 SOT54	TO-251 IPAK	SOT82	TO-220 SOT78	TO-220 Ins SOT78D	TO-220F SOT186A SC-67	TO-3P SOT1259 SC-65	TO-3P Ins SOT1292	TO-247 SOT429	TO-247Plus
55	35	800	5 min - 35 max																
60	38	800	5 min - 35 max					TYN60B-T						TYN55-T					
65	41	800	5 min - 35 max											TYN60-T					
79	50	1600	80																
		1200	50																
79	50	1400	50													BT155K-T	TYN50Z-T	BT155W-T(-A)	
		1200 / 1600	80															BT155W-T	
80	51	800	50															TYN50W-T	
		1200	70															TYN50W-T	
94	60	1400	80															TYN80W-T	
		1200	70															TYN80W-T	
126	80	1600	80															TYN80W-TN	
		1600	80																
160	100	1200	70															BT158W-T	
		1600	15 min - 100 max															TYN100W-T	
250	160	1600	15 min - 100 max																TYN100WP-T
																			TYN160WP-T

PCB Mounting Top-side Cooling Thyristor/Diode Modules

W xAT TD G 80 TB S 16 T - A

W = WeEn

Configuration

AT = Antiparallel Thyristors

DF = Diode Full Bridge

DS = Diode3-phase(Six Pack) Bridge

UF = Ultrafast Diode Half Bridge

HH = Half Controlled Half Bridge

HF = Half Controlled Full Bridge

HS = Half Controlled 3-phase(Six Pack) Bridge

TS = Thyristor 3-phase(Six Pack) Bridge

Configuration optional A

xTyD = x Thyristors + y Diodes

Configuration optional B

ML = MOSFET Boost Chopper

MR = MOSFET Buck Chopper

GL = IGBT Boost Chopper

Automotive Sensor optional

T = Temperature sensor

Voltage rating

16 = 1600V

Pin configuration

S = Solder pin

P = Press-fit pin

Package type

TB = WeEnTOP-B

TC = WeEnTOP-C

B1 = WeEnPACK-B1

B2 = WeEnPACK-B2

Current rating

80 = 80A

Note: x / y: number of pairs / quantities, not shown if equals 1.

In the spotlight

PCB Mounting Top-side Cooling Thyristor/Diode Modules

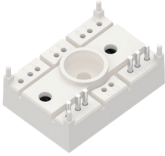
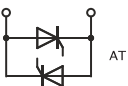
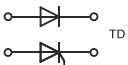
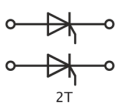
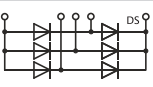
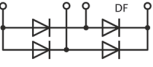
Planar passivated for voltage ruggedness and reliability

Baseplate free for better thermal dissipation

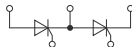
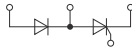
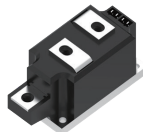
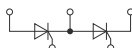
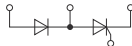
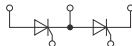
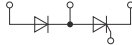
Flexible topology configuration

Compact design and space saving

Types in **bold blue** represent new products
Types in **bold red italic** represent products in development
Types in **bold orange italic** represent products in plan

Package	Configuration	I _{T(RMS)} (A)	I _{T(AV)} / I _{F(AV)} (A)	I _{TSM} / I _{FSM} (A)	V _{DRM} & V _{RRM} (V)	I _{GT} (max) (mA)	dI _T /dt (A/μs)	dV _o /dt (V/μs)	T _{vj} (°C)	Product name
 WeEnTOP-B	 AT	101	-	1500	1200	30 min - 100 max	200	1500	125	WAT100TBS12
					1600	30 min - 100 max	200	1500	125	WAT100TBS16
		134	-	2000	1200	30 min - 100 max	200	1500	125	WAT120TBS12
	 TD				1600	30 min - 100 max	200	1500	125	WAT120TBS16
		180	-	2500	1200	30 min - 100 max	200	1500	125	WAT180TBS12
		101	100	1500	1200	30 min - 100 max	200	1500	125	WTD100TBS12
	 2T	134	120	2000	1200	30 min - 100 max	200	1500	130	WTD120TBS12
		180	-	2500	1200	30 min - 100 max	200	1500	150	WTD180TBS12
					1600	30 min - 100 max	200	1500	150	WTD180TBS16
		101	-	1500	1200	30 min - 100 max	200	1500	130	W2T100TBS12
					1600	30 min - 100 max	200	1500	150	W2T100TBS16
		134	-	2000	1200	30 min - 100 max	200	1500	125	W2T120TBS12
 WeEnTOP-E	 DS	180	-	2500	1200	30 min - 100 max	200	1500	150	W2T180TBS12
					1600	30 min - 100 max	200	1500	125	W2T120TBS16
					1600	30 min - 100 max	200	1500	125	W2T120TBS16
	 DF	180	-	2500	1200	30 min - 100 max	200	1500	150	W2T180TBS12
					1600	30 min - 100 max	200	1500	125	W2T120TBS16
					1600	30 min - 100 max	200	1500	125	W2T120TBS16
	 3AT	101	-	1500	1200	30 min - 100 max	200	1500	150	W2T100TBS12
					1600	30 min - 100 max	200	1500	125	W2T120TBS16
					1600	30 min - 100 max	200	1500	125	W2T120TBS16

Types in **bold blue** represent new products
Types in ***bold red italic*** represent products in development
Types in ***bold orange italic*** represent products in plan

Package	Configuration	$I_{T(RMS)}$ (A)	$I_{T(AV)}$ (A)	I_{TSM} (A)	V_{DRM} & V_{RRM} (A)	dI_T/dt (A/ μ s)	dV_D/dt (V/ μ s)	T_{vj} (°C)	$I_{GT(max)}$ (mA)	Product name
 WeEnPACK-20mm TO-240AA		31	20	350	1200	150	1500	150	30 min - 100 max	WTMH20T12R
		47	30	530	1200	150	1500	150	30 min - 80 max	WTMH30T12(R)
		63	40	700	1400	200	1500	150	30 min - 100 max	WTMH40T14
		94	60	750	1600	150	1500	150	30 min - 80 max	WTMH40T16(R)
		125	80	1700	1200	200	1500	150	30 min - 100 max	WTMH80T12R
					1600	200	1500	150	30 min - 100 max	WTMH80T16R
		157	100	2000	1200	200	1500	150	30 min - 100 max	WTMH100T12R
					1600	200	1500	150	30 min - 100 max	WTMH100T16R
	182	116	2300	1600	200	1500	150	30 min - 100 max	WTMH116T16(R)	
	220	140	2800	1200	200	1500	150	30 min - 100 max	WTMH140T12R	
			2800	1600	200	1500	150	30 min - 100 max	WTMH140T16R	
 WeEnPACK-34mm		315	200	5600	1200	200	1500	150	30 min - 150 max	WTMH200S12
		408	260	7000	1600	200	1500	150	30 min - 150 max	WTMH260S16
		315	200	5600	1200	200	1500	150	30 min - 150 max	WHMH200S12
					1600	200	1500	150	30 min - 150 max	WHMH200S16
		315	200	7000	1600	-	-	150	-	WDMH200S16
		315	200	7000	1600	-	-	150	-	WDMK200S16
 WeEnPACK-50mm		440	280	10000	1600	250	1500	125	30 min - 150 max	WTMH280E16
					1800	250	1500	125	30 min - 150 max	WTMH280E18
		520	330	10500	1600	250	1500	125	30 min - 150 max	WTMH330E16
					1800	250	1500	125	30 min - 150 max	WTMH330E18
		440	280	10000	1600	250	1500	125	30 min - 150 max	WHMH280E16
					1800	250	1500	125	30 min - 150 max	WHMH280E18
 WeEnPACK-50mm		940	600	19000	1600	200	1500	135	30 min - 150 max	WTMH600F16
		1256	800	25000	1600	200	1500	135	30 min - 150 max	WTMH800F16
		940	600	19000	1600	200	1500	135	30 min - 150 max	WHMH600F16
		1256	800	25000	1600	200	1500	135	30 min - 150 max	WHMH800F16
 WeEnPACK-70mm		1256	800	35000	1600	250	1500	125	30 min - 150 max	WTMS800G16

02 Power Diodes

#Selection Guide
选型手册

2026 WeEn Semiconductors

All rights reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use. Publication thereof does not convey nor imply any license under patent- or other industrial or intellectual property rights.

Date of release: March, 2026

Document order number: 20260301



Follow us on WeChat



Follow us on LinkedIn



2026



WeEn
WeEn Semiconductors

Power Efficiency
for A Cooler Planet

02

Power Diodes

SCHOTTKY RECTIFIER

CASCO DIODE

HYBIRD RECTIFIER

BRIDGE RECTIFIER

3-PHASE BRIDGE RECTIFIER

AUTO GRADE RECTIFIER

ULTRAFAST RECTIFIER

HYPERFAST RECTIFIER

STANDARD RECTIFIER

SCHOTTKY RECTIFIER
Power schottky diodes for
SMPS output rectication

Types in **bold blue** represent new products
Types in **bold red italic** represent products in development

V _{RRM} (V)	I _{F(AV)} (A)	V _F (typ.) @ 25C (V)	V _F (typ.) @ 125C (V)	@ I _F per diode (A)	TO220	TO220F	TO263	TO252	IITO220-2L	TO247-3L
										
45	2 x 10	0.48	0.42	10	WN3S20H45C	WN3S20H45CX				
45	2 x 15	0.53	0.48	15	WN3S3045C	WN3S3045CX	WN3S3045CB			
45	2 x 15	0.50	0.44	15	WN3S30H45C	WN3S30H45CX	WN3S30H45CB			
60	2x 15	0.62	0.61	15	WN3S3060C	WN3S3060CX	WN3S3060CB			
60	2x 15	0.57	0.55	15	WN3S30H60C	WN3S30H60CX	WN3S30H60CB			
60	20	0.69	0.68	20				WN3S2060D		
60	30	0.78	0.77	30				WN3S3060D		
65	2 x 5	0.63	0.61	5				WN3S10H65CD		
100	2 x 5	0.67	0.62	5	WN3S10100C	WN3S10100CX	WN3S10100CB	WN3S10100CD		
100	2 x 10	0.90	0.76	10	WN3S20S100C	WN3S20S100CX	WN3S20S100CB	WN3S20S100CD		
100	2 x 10	0.89	0.73	10	WNS20S100C	WNS20S100CX	WNS20S100CB			
100	2 x 10	0.70	0.63	10	WNS20H100C	WNS20H100CX	WNS20H100CB			
100	2 x 15	0.64	0.60	15	WNS30H100C	WNS30H101CX	WNS30H100CB			
100	2 x 20	0.71	0.64	20	WNS40100C					
100	2 x 20	0.67	0.63	20	WNS40H100C	WNS40H100CX	WNS40H100CB			
100	20	0.75	0.68	20				WN3S20100D		
100	30	0.86	0.76	30				WN3S30100D		
120	2 x 15	0.95	0.71	15	WN3S30H120C	WN3S30H120CX	WN3S30H120CBT			
120	2 x 20	0.95	0.72	20	WN3S40120C	WN3S40120CX	WN3S40120CBT			
150	2 x 5	0.81	0.68	5	WN3S10S150CT	WN3S10S150CXT	WN3S10S150CBT	WN3S10S150CDT		
150	2 x 10	0.84	0.72	10	WN3S20150CT	WN3S20150CXT	WN3S20150CBT	WN3S20150CDT		
150	2 x 15	0.81	0.67	15	WN3S30H150CT	WN3S30H150CXT	WN3S30H150CBT			
150	2 x 20	0.83	0.71	20	WN3S40150CT	WN3S40150CXT	WN3S40150CBT			
150	20	0.87	0.75	20				WN3S20150DT		
150	30	0.89	0.78	30				WN3S30150DT		
170	2 x 15	0.81	0.67	15			WN3S30H170CBT			
170	2 x 20	0.84	0.71	20			WN3S40170CBT			
170	2 x 30	0.83	0.71	30						WN3S61170CWT WN3S80170CWT
170	2 x 40	0.80	0.67	40						
200	2 x 5	0.83	0.70	5	WN3S10S200CT	WN3S10S200CXT	WN3S10S200CBT	WN3S10S200CDT		
200	2 x 5	0.82	0.69	5	WN3S10200CT			WN3S10200CDT		
200	2 x 5	0.81	0.68	5				WN3S10H200CDT		
200	2 x 10	0.86	0.75	10	WN3S20200CT	WN3S20200CXT	WN3S20200CBT	WN3S20200CDT		
200	2 x 15	0.88	0.77	15	WN3S30S200CT	WN3S30S200CXT	WN3S30S200CBT			
200	2 x 15	0.85	0.73	15			WN3S30200CBT			
200	2 x 20	0.87	0.75	20	WN3S40200CT	WN3S40200CXT	WN3S40200CBT			WN3S40200CWT
200	15	0.88	0.77	15		WN3S15200XT			WN3S15200YT	
200	20	0.90	0.80	20				WN3S20200DT		
200	30	0.93	0.8	30				WN3S30200DT		

CASCO DIODES
employing series die technology
for the lowest possible t_{rr}

Types in **bold blue** represent new products
Types in **bold red italic** represent products in development

Casco Diodes for Continuous Current Mode PFC

V _{RRM} (V)	I _{F(AV)} (A)	V _F (typ.)@150C (V)	@I _F (A)	t _{rr} (typ.)@25C (us)	TO220F-2L
					
600	8	2	8	12.5	BYC58X-600

HYBRID DIODES (FRD+ STD diodes)

Types in **bold blue** represent new products
Types in **bold red italic** represent products in development

FRD V_{RRM} (V)	$I_{F(AV)}$ (A)	$V_F(\text{typ})@150C$ (V)	@ I_F (A)	$t_r(\text{typ})@25C$ (ns)	STD V_{RRM} (V)	$I_{F(AV)}$ (A)	$V_F(\text{typ})@150C$ (V)	@ I_F (A)	TO247-3L
									
600	30	1.38	30	35	1600	45	1.1	45	WNC3060D45160W

BRIDGE RECTIFIER

Types in **bold Brown** represent new products planned
Types in **bold blue** represent new products
Types in **bold red italic** represent products in development

V_{RRM} (V)	$I_{F(AV)}$ (A)	$V_F(\text{typ})@25C$ (V)	@ I_F (A)	$t_r(\text{typ})@25C$ (us)	GBU	GBJ
						
600	15	0.88	15	3	<i>WNB1560U</i>	
600	25	0.9	25	3	<i>WNB2560U</i>	WNB2560M
800	15	0.9	15	3	<i>WNB1580U</i>	
800	25	0.92	25	3	<i>WNB2580U</i>	<i>WNB2580M</i>
1600	50	1	50	3		<i>WNB5016M</i>

3-PHASE BRIDGE RECTIFIER

Types in **bold blue** represent new products
Types in **bold red italic** represent products in development

V_{RRM} (V)	$I_{F(AV)}$ (A)	$V_F(\text{typ})@25C$ (V)	@ I_F (A)	$t_r(\text{typ})@25C$ (us)	WMM01
					
1600	75	1.25	75		WDMF75M16

AUTO POWER DIODES

Types in **bold Brown** represent new products planned
Types in **bold blue** represent new products
Types in **bold red italic** represent products in development

V_{RRM} (V)	$I_{F(AV)}$ (A)	$V_F(\text{typ})@150C$ (V)	@ I_F (A)	$t_r(\text{typ})@25C$ (ns)	TO247-2L	TO263
						
600	30	1.4	30	60		
600	30	1.4	30	60	BYC30W-600PT2-A	
600	30	0.98	30	65		<i>BYC30B-600P-A</i>
600	60	1.1	60	79		
1200	50	1.65	50	249	<i>BYV30W-600PT2-A</i>	
1200	35	1.15	35		<i>BYV60W-600PT2-A</i>	<i>BYV50B-1200P-A</i>
1200	45	1.1	45			WND35P12B-A
1200	50	1.18	50		WND45P12W-A	<i>WND50P12B-A</i>
1200	60	0.99	60		WND60P12W-A	

ULTRAFAST
POWER DIODES

Types in **bold blue** represent new products
Types in **bold red italic** represent products in development

V _{RRM} (V)	I _{F(AV)} (A)	V _F (typ) @150 C (V)	@I _F (A)	t _n (typ) @25C (ns)	SMA	SMB	SMC	TO220-2L	TO220F-2L	IITO220-2L	TO220	TO220F	SOD123F	SOT223	TO252	TO263	SOT226	TO247-2L	TO247-3L	TO-3P	TO-3PF
																					
100	8	0.8	8	20				BYW29E-100													
100	2 x 10	0.72	8	20							BYV32E-100			BYV40E-150							
150	2 x 0.75	0.5	0.5	10																	
150	8	0.8	8	20				BYW29E-150													
150	2 x 10	0.72	8	20							BYV32E-150										
150	2 x 15	0.78	15	20							BYV42E-150										
200	3	0.7	3	27			MUR320								BYW29ED-200						
200	8	0.8	8	20				BYW29E-200	BYW29EX-200												
200	2 x 5	0.8	5	15							BYQ28E-200	BYQ28X-200			BYQ28ED-200PL						
200	2 x 5	0.8	5	15							BYQ28E-200E										
200	14	0.83	14	20				BYV79E-200													
200	2 x 8	0.84	8	20							BYQ30E-200										
200	2 x 10	0.72	8	20												BYV32EB-200P	BYV32G-200				
200	2 x 15	0.78	15	20							BYV32E-200P					BYV42EB-200	BYV42G-200		BYV60W-600P	BYQ72EK-200	
300	2 x 5	0.95	5	50							BYV42E-200								BYQ60W-600PT2		
300	2 x 10	0.81	10	9							BYQ42E-200										
300	2 x 30	0.85	30	33							BYT28-300					BYV32EB-300P					
400	4	0.8	4	55							BYV32E-300P	BYV32EX-300P							BYV430W-300P	BYV430K-300P	
400	9	0.9	8	50			MUR440	BYV29-400													
400	2 x 10	0.87	10	50																	
400	2 x 15	0.95	15	35							BYV34-400								BYV74W-400		
500	9	0.9	8	50				BYV29-500	BYV29X-500							BYV29B-500					
500	2 x 5	0.95	5	50																	
500	14	0.9	15	50				BYT79-500			BYT28-500	BYT28X-500									
500	2 x 10	0.87	10	50																	
500	2 x 15	0.95	15	50							BYV34-500										
600	1	0.88	1	45	MURS160						BYV44-500		MURS160P								
600	3	0.88	3	36		MURS160B															
600	4	0.99	4	29		MURS360B															
600	5	1.15	5	38											BYV4MD-600P						
600	5	0.9	5	45											BYV5ED-600P						
600	5	1.1	5	17.5			MUR560	BYV25F-600	BYV25FX-600						BYV25FD-600	BYV25FB-600					
600	5	0.97	5	50					BYV25X-600						BYV25D-600		BYV25G-600				
600	8	1.07	8	60				BYR29-600	BYR29X-600												
600	8	0.8	8	66			MUR860														
600	8	1.1	8	24					BYV29MFX-600P												
600	9	0.97	8	50				BYV29-600P	BYV29X-600P						BYV29D-600P	BYV29B-600P	BYV29G-600P				
600	9	1.25	8	17.5				BYV29F-600	BYV29FX-600						BYV29FD-600	BYV29FB-600					
600	10	1.6	10	20				BYV10-600P	BYV10X-600P												
600	10	0.92	10	40						BYT10Y-600P											
600	10	1.6 max	10	35					BYV10EX-600P						BYV10D-600P						
600	10	1.1	10	45				BYV10M-600P	BYV10MX-600P						BYV10ED-600P						
600	10	1.1	10	58												BYV10MB-600P					
600	15	1	15	50				BYT79-600													
600	15	0.96	15	50					BYT79X-600P												
600	2 x 10	0.92	10	50												BYT79B-600P					
600	2 x 10	1	10	30												BYV34G-600					
600	2 x 10	1.3	10	20							BYV34-600	BYV34X-600									
600	2 x 15	1.3	15	20							BYV410-600P	BYV410X-600P									
600	2 x 15	1.3	15	20							BYV410X-600										
600	30	0.96	30	85															BYV415W-600P	BYV415K-600P	BYV415J-600P
600	30	0.98	30	42																	BYV30JT-600P
600	40	0.97	40	52				BYV30-600P	BYV30X-600P							BYV30B-600P		BYV30W-600P/PT2			
600	2 x 30	1.25	30	53														BYV40W-600P			
600	60	1.2	60	53															BYV430W-600P		BYV430J-600P
600	60	1.1	60	79																	
650	8	1.13	8	56				BYV8M-650P	BYV8MX-650P												
650	10	1.2	10	53												BYV8MD-650P	BYV8MB-650P				
650	10	1.5	10	55												BYV10MED-650P					
650	15	1.35	15	45												BYV10MD-650P					
650	20	1.5	20	50				BYV15M-650P	BYV15MX-650P							BYV15MD-650P	BYV15MB-650P				
650	20	1.25	20	65				BYV21M-650P	BYV21MX-650P							BYV21MD-650P	BYV21MB-650P				
650	20	1.25	20	65				BYV20M-650P	BYV20MX-650P												
650	30	1.06	30	78				BYV30M-650P	BYV30MX-650P												
650	50	1.05	50	65																	
650	80	1.2	80	85															BYV30MW-650PT2		
650	80	1.2	80	85															BYV50MW-650PT2		
800	8	1.07	8	60				BYR29-800													
800	8	1.2	8	40					BYR29X-800P												
1200	5	1.6	5	50											BYR5D-1200P						

HYPERFAST
POWER DIODES

Types in **bold blue** represent new products
Types in **bold red italic** represent products in development
Hyperfast diodes for Continuous Current Mode PFC

V _{RRM} (V)	I _{F(AV)} (A)	V _F (typ)@150C (V)	@I _F (A)	t _r (typ)@25C (ns)	TO220-2L	TO220F-2L	I ² TO220-2L	TO220	TO220F	TO252	TO263	TO247-2L	TO247-3L	TO3PF
														
400	2 x 5	0.85	5	30					BYC405X-400P					
500	5	1.15	5	16	BYC5D-500	BYC5DX-500								
600	5	1.4	5	19							BYC5B-600			
600	5	1.55	5	13	BYC5-600P	BYC5X-600P								
600	8	1.4	8	20	BYC8D-600	BYC8DX-600								
600	8	1.4	8	19	BYC8-600P	BYC8X-600P					BYC8B-600P			
600	10	1.4	10	19							BYC10B-600			
600	10	1.3	10	19	BYC10-600P	BYC10X-600P								
600	10	1.4	10	18	BYC10D-600	BYC10DX-600								
600	2 x 5	1.4	5	19										
600	15	1.4	15	22	BYC15-600P	BYC15X-600P		BYC10-600CT						
600	15	1.27	15	26	BYC15M-600P	BYC15M-600P				BYC15MD-600P	BYC15MB-600P			
600	20	1.4	20	28		BYC20MX-600P						BYC20MW-600PT2		
600	20	1.4	20	19	BYC20-600									
600	20	1.2	20	26	BYC20D-600P	BYC20DX-600P								
600	20	1.2	20	25		BYC20X-600P								
600	30	1.4	30	35										BYC10-600CT
600	30	1.5	30	26			BYC30MY-600PS					BYC30DW-600P		
600	30	1.38	30	29	BYC30-600P	BYC30X-600P					BYC30B-600P	BYC30W-600P	BYC10-600CT	
600	30	1.38	30	26			BYC30Y-600P					BYC30W-600PT2		
600	30	1.5	30	51		BYC30X-600PS								
600	30	1.4	30	60			BYC30Y-600PS					BYC30W-600PT2-A		
600	60	1.55	60	40								BYC60W-600P/PT2		
600	75	1.6	75	42								BYC75W-600P/PT2		
600	100	1.2	100	55								BYC100MW-600PT2		
650	8	1.45	8	28	BYC8M-650P	BYC8MX-650P				BYC8MD-650P	BYC8MB-650P			
650	10	1.5	10	29	BYC10M-650P	BYC10MX-650P				BYC10MD-650P	BYC10MB-650P			
650	12	1.6	12	30	BYC12M-650P	BYC12MX-650P				BYC12MD-650P				
650	15	1.6	15	30	BYC15M-650P	BYC15MX-650P								
650	30	1.38	30	38	BYC30M-650P	BYC30MX-650P					BYC15MB-650P			
650	30	1.5	30	52	BYC30M-650PS	BYC30MX-650PS					BYC30MB-650P	BYC30MW-650PT2		
650	30	1.45	30	72	BYC31M-650PS	BYC31MX-650PS	BYC31MY-650PS					BYC30MW-650PST2		
650	50	1.23	50	75								BYC50MW-650PT2		
650	60	1.33	60	74								BYC60MW-650PT2		
650	80	1.46	80	60								BYC80MW-650PT2		
650	80	1.6	80	63								BYC80MW-650PST2		
1200V	5	2	5	42	BYC5-1200P									
1200V	8	2	8	46	BYC8-1200P									
1200V	15	2	15	61	BYC15-1200P									
1200V	30	2.1	30	70	BYC30-1200P									
1200V	40	2.2	40	91										
1200V	60	2.2	60	96								BYC30W-1200P		
1200V	75	2.2	75	113								BYC40W-1200P		
1200V	100	2.2	100	115								BYC60W-1200P		
												BYC75W-1200P		
												BYC100W-1200P		

STANDARD RECTIFIER

Types in **bold blue** represent new products
Types in **bold red italic** represent products in development

V _{RRM} (V)	I _{F(AV)} (A)	V _F (typ)@150C (V)	@I _F (A)	IFSM@10ms (A)	TO220-2L	TO220F-2L	I ² TO220-2L	TO252	TO263	TO247-2L
										
600V	10	0.82	10	350		WND10M600X				
800V	8	0.84	8	150				SK8D		
800V	10	1.00	10	150		WND10P08X				
800V	10	1.00	10	180			WND10P08Y			
800V	35	1.15	35	400						
1200V	35	1.15	35	400	WND35P08	WND35P08X			WND35P12B	
1600V	8	0.95	8	150	WND35P12	WND35P12X				
1600V	35	1.15	35	400		WND08P16X		WND08P16D		
1600V	35	1.15	35	400	WND35P16	WND35P16X			WND35P16B	
1600V	45	1.10	45	475						WND45P16W
1600V	60	0.99	60	950						WND60P16W
1600V	90	1.00	90	1440						WND90P16W
2000V	60	0.99	60	950						WND60P20W
2000V	90	1.00	90	1440						WND90P20W



WeEn
WeEn Semiconductors

Power Efficiency
for A Cooler Planet

02

Transient Voltage
Suppressors

TVS portfolio Summary

TVS Family	Directional	VR range	Pppm	Package
SODxxA/CA	Uni/Bi-direction	5-85V	200W	SOD123
P4SODxxA/CA	Uni/Bi-direction	5-85V	400W	SOD123
SMAJxxxA/CA	Uni/Bi-direction	5-220V	400W	SMA
P6SMBJxxxA/CA	Uni/Bi-direction	5-220V	600W	SMB
SMBJxxA/CA	Uni/Bi-direction	5-85V	600W	SMB
P6SMALxxA	Uni-direction	5-85V	600W	SMAL
P1KSMBJxxA/CA	Uni/Bi-direction	5.8-85.5V	1000W	SMB
SMCJxxxA/CA	Uni/Bi-direction	5-220V	1500W	SMC
SMDJxxxA/CA	Uni/Bi-direction	9-85V	3000W	SMC
5.0SMDJxxxA/CA	Uni/Bi-direction	12-170V	5000W	SMC
SM8SxxA	Uni-direction	10-43V	6600W	DO218

400W TVS Diodes, P4SOD Series

Package

SOD123



	SPEC	Requirement
Package	SOD123	HF + UL94V0+RoHS +Pb free plating
Power	400W	10/1000 pulse
Tj	-65C~150C	
Tstg	150C	
ESD	30KV(Air) 30KV(contact)	IEC-61000-4-2

Uni-direction	Bi-direction	Package	I _T (mA)	V _{BR} (V) --min.	V _{BR} (V) --max.	V _R (V)	I _R (uA) --max.	10/1000us Max peak pulse currnt I _{pp} (A)	10/1000us max clamp voltage V _c @ I _{pp} (V)
P4SOD5.0A	P4SOD5.0CA	SOD123	10	6.4	7	5	200	43.5	9.2
P4SOD6.0A	P4SOD6.0CA	SOD123	10	6.67	7.37	6	200	38.8	10.3
P4SOD6.5A	P4SOD6.5CA	SOD123	10	7.22	7.98	6.5	125	35.7	11.2
P4SOD7.0A	P4SOD7.0CA	SOD123	10	7.78	8.6	7	75	33.3	12
P4SOD8.0A	P4SOD8.0CA	SOD123	1	8.89	9.83	8	25	29.4	13.6
P4SOD9.0A	P4SOD9.0CA	SOD123	1	10	11.1	9	5	26	15.4
P4SOD10A	P4SOD10CA	SOD123	1	11.1	12.3	10	2.5	23.5	17
P4SOD11A	P4SOD11CA	SOD123	1	12.2	13.5	11	1	22	18.2
P4SOD12A	P4SOD12CA	SOD123	1	13.3	14.7	12	1	20.1	19.9
P4SOD13A	P4SOD13CA	SOD123	1	14.4	15.9	13	1	18.6	21.5
P4SOD14A	P4SOD14CA	SOD123	1	15.6	17.2	14	1	17.2	23.2
P4SOD15A	P4SOD15CA	SOD123	1	16.7	18.5	15	1	16.4	24.4
P4SOD16A	P4SOD16CA	SOD123	1	17.8	19.7	16	1	15.4	26
P4SOD17A	P4SOD17CA	SOD123	1	18.9	20.9	17	1	14.5	27.6
P4SOD18A	P4SOD18CA	SOD123	1	20	22.1	18	1	13.7	29.2
P4SOD20A	P4SOD20CA	SOD123	1	22.2	24.5	20	1	12.3	32.4
P4SOD22A	P4SOD22CA	SOD123	1	24.4	26.9	22	1	11.3	35.5
P4SOD24A	P4SOD24CA	SOD123	1	26.7	29.5	24	1	10.3	38.9
P4SOD26A	P4SOD26CA	SOD123	1	28.9	31.9	26	1	9.5	42.1
P4SOD28A	P4SOD28CA	SOD123	1	31.1	34.4	28	1	8.8	45.4
P4SOD30A	P4SOD30CA	SOD123	1	33.3	36.8	30	1	8.3	48.4
P4SOD33A	P4SOD33CA	SOD123	1	36.7	40.6	33	1	7.5	53.3
P4SOD36A	P4SOD36CA	SOD123	1	40	44.2	36	1	6.9	58.1
P4SOD40A	P4SOD40CA	SOD123	1	44.4	49.1	40	1	6.2	64.5
P4SOD43A	P4SOD43CA	SOD123	1	47.8	52.8	43	1	5.8	69.4
P4SOD45A	P4SOD45CA	SOD123	1	50	55.3	45	1	5.5	72.7
P4SOD48A	P4SOD48CA	SOD123	1	53.3	58.9	48	1	5.2	77.4
P4SOD51A	P4SOD51CA	SOD123	1	56.7	62.7	51	1	4.9	82.4
P4SOD54A	P4SOD54CA	SOD123	1	60	66.3	54	1	4.6	87.1
P4SOD58A	P4SOD58CA	SOD123	1	64.4	71.2	58	1	4.3	93.6
P4SOD60A	P4SOD60CA	SOD123	1	66.7	73.7	60	1	4.1	96.8
P4SOD64A	P4SOD64CA	SOD123	1	71.1	78.6	64	1	3.9	103
P4SOD70A	P4SOD70CA	SOD123	1	77.8	86	70	1	3.5	113
P4SOD75A	P4SOD75CA	SOD123	1	83.3	92.1	75	1	3.3	121
P4SOD78A	P4SOD78CA	SOD123	1	86.7	95.8	78	1	3.2	126
P4SOD85A	P4SOD85CA	SOD123	1	94.4	104	85	1	2.9	137

600W TVS Diodes, P6SMBJ Series

Package
SMBJ



	SPEC	Requirement
Product	P6SMBJxxx	
Package	SMB (J-lead)	HF + UL94V0+RoHS +Pb free plating
Power	600W	10/1000 pulse
Tj	-65C~150C	
Tstg	-65C ~150C	
ESD	30KV(Air) 30KV(contact)	IEC-61000-4-2
IFSM	100A	8.3ms single half sine wave
VF max	3.5V	50A, single die

Uni-direction	Bi-direction	I _T (mA)	V _{BR} (V) --min.	V _{BR} (V) --max.	V _R (V)	I _R (uA) --max.	10/1000us Max peak pulse currnt I _{pp} (A)	10/1000us max clamp voltage V _c @ I _{pp} (V)
P6SMBJ5.0A	P6SMBJ5.0CA	10	6.45	6.98	5	400	65.3	9.2
P6SMBJ6.0A	P6SMBJ6.0CA	10	6.8	7.32	6	400	58.3	10.3
P6SMBJ6.5A	P6SMBJ6.5CA	10	7.27	7.92	6.5	250	53.6	11.2
P6SMBJ7.0A	P6SMBJ7.0CA	10	7.82	8.57	7	100	50	12
P6SMBJ8.0A	P6SMBJ8.0CA	1	8.95	9.76	8	50	44.2	13.6
P6SMBJ9.0A	P6SMBJ9.0CA	1	10.1	11	9	10	39	15.4
P6SMBJ10A	P6SMBJ10CA	1	11.21	12.19	10	5	35.3	17
P6SMBJ11A	P6SMBJ11CA	1	12.32	13.38	11	1	33	18.2
P6SMBJ12A	P6SMBJ12CA	1	13.43	14.57	12	1	30.2	19.9
P6SMBJ13A	P6SMBJ13CA	1	14.54	15.76	13	1	28	21.5
P6SMBJ14A	P6SMBJ14CA	1	15.75	17.04	14	1	25.9	23.2
P6SMBJ15A	P6SMBJ15CA	1	16.86	18.34	15	1	24.6	24.4
P6SMBJ16A	P6SMBJ16CA	1	17.97	19.52	16	1	23.1	26
P6SMBJ17A	P6SMBJ17CA	1	19.08	20.72	17	1	21.8	27.6
P6SMBJ18A	P6SMBJ18CA	1	20.19	21.9	18	1	20.6	29.2
P6SMBJ20A	P6SMBJ20CA	1	22.41	24.28	20	1	18.6	32.4
P6SMBJ22A	P6SMBJ22CA	1	24.63	26.66	22	1	16.9	35.5
P6SMBJ24A	P6SMBJ24CA	1	26.95	29.23	24	1	15.5	38.9
P6SMBJ26A	P6SMBJ26CA	1	29.12	31.67	26	1	14.3	42.1
P6SMBJ28A	P6SMBJ28CA	1	31.33	34.16	28	1	13.3	45.4
P6SMBJ30A	P6SMBJ30CA	1	33.55	36.54	30	1	12.4	48.4
P6SMBJ33A	P6SMBJ33CA	1	36.98	40.3	33	1	11.3	53.3
P6SMBJ36A	P6SMBJ36CA	1	40.3	43.9	36	1	10.4	58.1
P6SMBJ40A	P6SMBJ40CA	1	44.7	48.8	40	1	9.3	64.5
P6SMBJ43A	P6SMBJ43CA	1	48.2	52.4	43	1	8.7	69.4
P6SMBJ45A	P6SMBJ45CA	1	50.4	54.9	45	1	8.3	72.7
P6SMBJ48A	P6SMBJ48CA	1	53.7	58.5	48	1	7.8	77.4
P6SMBJ51A	P6SMBJ51CA	1	57.1	62.3	51	1	7.3	82.4
P6SMBJ54A	P6SMBJ54CA	1	60.5	65.8	54	1	6.9	87.1
P6SMBJ58A	P6SMBJ58CA	1	64.9	70.7	58	1	6.5	93.6
P6SMBJ60A	P6SMBJ60CA	1	67.2	73.2	60	1	6.2	96.8
P6SMBJ64A	P6SMBJ64CA	1	71.6	78	64	1	5.9	103
P6SMBJ70A	P6SMBJ70CA	1	78.4	85.4	70	1	5.3	113
P6SMBJ75A	P6SMBJ75CA	1	83.9	91.5	75	1	5	121
P6SMBJ78A	P6SMBJ78CA	1	87.4	95.1	78	1	4.8	126
P6SMBJ85A	P6SMBJ85CA	1	95.1	103.3	85	1	4.4	137
P6SMBJ90A	P6SMBJ90CA	1	100	111	90	1	4.1	146
P6SMBJ100A	P6SMBJ100CA	1	111	123	100	1	3.7	162
P6SMBJ110A	P6SMBJ110CA	1	122	135	110	1	3.4	177
P6SMBJ120A	P6SMBJ120CA	1	133	147	120	1	3.1	193
P6SMBJ130A	P6SMBJ130CA	1	144	159	130	1	2.9	209
P6SMBJ150A	P6SMBJ150CA	1	167	185	150	1	2.5	243
P6SMBJ160A	P6SMBJ160CA	1	178	197	160	1	2.3	259
P6SMBJ170A	P6SMBJ170CA	1	189	209	170	1	2.2	275
P6SMBJ180A	P6SMBJ180CA	1	201	222	180	1	2.1	292
P6SMBJ190A	P6SMBJ190CA	1	209	231	190	1	2	304
P6SMBJ200A	P6SMBJ200CA	1	224	247	200	1	1.9	324
P6SMBJ220A	P6SMBJ220CA	1	246	272	220	1	1.7	356
P6SMB200AG		1	189	209	170	1	2.2	275

5000W TVS Diodes, 5.0SMDJ Series



	SPEC	Requirement
Package	SMC(J lead)	HF + UL94V0+RoHS +Pb free plating
Power	5000W	10/1000 pulse
Tj	-65C~150C	
Tstg	175C	
ESD	30KV(Air) 30KV(contact)	IEC-61000-4-2
IFSM	300A	8.3ms single half sine wave
VF max	5V	single die @100A

Uni-direction	Bi-direction	I _T (mA)	V _{BR} (V) --min.	V _{BR} (V) --max.	V _R (V)	I _R (uA) --max.	10/1000us Max peak pulse currnt I _{pp} (A)	10/1000us max clamp voltage V _c @ I _{pp} (V)
5.0SMDJ12A	5.0SMDJ12CA	1	13.3	14.7	12	1	252	19.9
5.0SMDJ13A	5.0SMDJ13CA	1	14.4	15.9	13	1	233	21.5
5.0SMDJ14A	5.0SMDJ14CA	1	15.6	17.2	14	1	216	23.2
5.0SMDJ15A	5.0SMDJ15CA	1	16.7	18.5	15	1	205	24.4
5.0SMDJ16A	5.0SMDJ16CA	1	17.8	19.7	16	1	193	26
5.0SMDJ17A	5.0SMDJ17CA	1	18.9	20.9	17	1	181	27.6
5.0SMDJ18A	5.0SMDJ18CA	1	20	22.1	18	1	172	29.3
5.0SMDJ20A	5.0SMDJ20CA	1	22.2	24.5	20	1	155	32.4
5.0SMDJ22A	5.0SMDJ22CA	1	24.4	26.9	22	1	141	35.5
5.0SMDJ24A	5.0SMDJ24CA	1	26.7	29.5	24	1	129	38.9
5.0SMDJ26A	5.0SMDJ26CA	1	28.9	31.9	26	1	119	42.1
5.0SMDJ28A	5.0SMDJ28CA	1	31.1	34.4	28	1	110	45.4
5.0SMDJ30A	5.0SMDJ30CA	1	33.3	36.8	30	1	103	48.4
5.0SMDJ33A	5.0SMDJ33CA	1	36.7	40.6	33	1	93.9	53.3
5.0SMDJ36A	5.0SMDJ36CA	1	40	44.2	36	1	86.1	58.1
5.0SMDJ40A	5.0SMDJ40CA	1	44.4	49.1	40	1	77.6	64.5
5.0SMDJ43A	5.0SMDJ43CA	1	47.8	52.8	43	1	72.1	69.4
5.0SMDJ45A	5.0SMDJ45CA	1	50	55.3	45	1	68.8	72.7
5.0SMDJ48A	5.0SMDJ48CA	1	53.3	58.9	48	1	64.7	77.4
5.0SMDJ51A	5.0SMDJ51CA	1	56.7	62.7	51	1	60.7	82.4
5.0SMDJ54A	5.0SMDJ54CA	1	60	66.3	54	1	57.5	87.1
5.0SMDJ58A	5.0SMDJ58CA	1	64.4	71.2	58	1	53.5	93.6
5.0SMDJ60A	5.0SMDJ60CA	1	66.7	73.7	60	1	51.7	96.8
5.0SMDJ64A	5.0SMDJ64CA	1	71.1	78.6	64	1	48.6	103
5.0SMDJ70A	5.0SMDJ70CA	1	77.8	86	70	1	44.3	113
5.0SMDJ75A	5.0SMDJ75CA	1	83.3	92.1	75	1	41.4	121
5.0SMDJ78A	5.0SMDJ78CA	1	86.7	95.8	78	1	39.7	126
5.0SMDJ85A	5.0SMDJ85CA	1	94.4	104	85	1	36.5	137
5.0SMDJ90A	5.0SMDJ90CA	1	100	111	90	1	34.3	146
5.0SMDJ100A	5.0SMDJ100CA	1	111	123	100	1	30.9	162
5.0SMDJ110A	5.0SMDJ110CA	1	122	135	110	1	28.3	177
5.0SMDJ120A	5.0SMDJ120CA	1	133	147	120	1	26	193
5.0SMD130A	5.0SMD130CA	1	144	159	130	1	24	209
5.0SMDJ150A	5.0SMDJ150CA	1	167	185	150	1	20.6	243
5.0SMDJ160A	5.0SMDJ160CA	1	178	197	160	1	19.3	259
5.0SMDJ170A	5.0SMDJ170CA	1	189	209	170	1	18.2	275

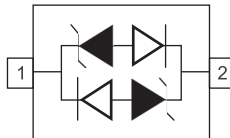
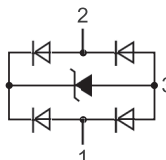
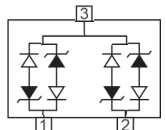
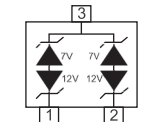
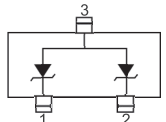
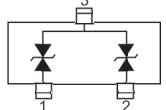
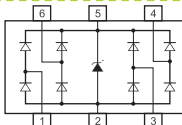


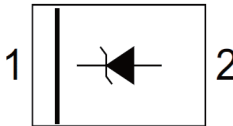
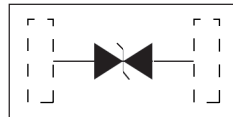
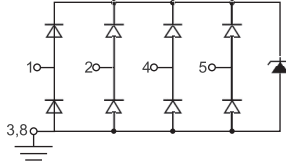
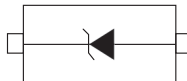
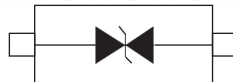
WeEn
WeEn Semiconductors

Power Efficiency
for A Cooler Planet

02

Electro-Static
Discharge Diodes

Part No.	Package outline	V _{RWM} (V)	V _{BR} (Min)	I _{PP} @8/20μs (A)	V _{CL} @I _{PP} (V)	I _{Rmax} @V _{RWM} (uA)	C _{Jmax} @0V/1 _{MHz} (pF)	P _{ppm} @8/20μs (W)	Diagram
SOD323 Package:									
ESDALD03BC		3.3	4.5	20	20	1	0.8	400	
ESDALD05BC		5	6.5	15	21	1	0.8	315	
ESDALD08BC		8	8.5	15	25	1	0.8	375	
ESDALD12BC		12	13.3	10	35	1	0.8	350	
ESDALD15BC		15	16.5	8	45	1	0.8	360	
ESDALD18BC		18	19.0	8	44	1	0.8	352	
ESDALD24BC		24	26.0	6	55	1	0.8	330	
ESDALD36BC		36	38.0	3	70	1	0.8	210	
SOT23-3 Package:									
ESDALD05UE2		5	6.0	4	15	0.1	0.8	60	
ESDALD05BE2		5	6.5	15	21	0.2	0.8	315	
ESDAHD712BE2		12/7	13.3/7.5	19	30	20	75	570	
ESDAHD03UE2		3	4	20	15	1	195	300	
ESDAHD05UE2		5	6	16	19	1	150	304	
ESDAHD12UE2		12	13.3	11	32	1	120	352	
ESDAHD24UE2		24	26	7	52	1	60	364	
ESDAHD05BE2		5	6.5	22	22	1	120	484	
ESDAHD12BE2		12	13.3	16	30	1	70	480	
ESDAHD24BE2	24	26	8	48	1	30	384		
SOT23-6 Package:									
ESDALD05UD4		5	6.0	5.5	16	0.1	1	88	

Part No.	Package outline	V _{RWM} (V)	V _{BR} (Min)	I _{PP} @8/20μs (A)	V _{CL} @I _{PP} (V)	I _{Rmax} @V _{RWM} (uA)	C _{Jmax} @0V/1 _{MHz} (pF)	P _{ppm} @8/20μs (W)	Diagram	
DFN1006 Package:										
ESDHD03UF		3.3	4.0	24	12	1	200	288		
ESDHD05UF		5	6.0	20	16	0.1	150 typ.	320		
ESDHD12UF		12	13.3	8	26	1	80	208		
ESDHD15UF		15	16.4	7	35	1	50	245		
ESDHD24UF		24	26.0	5	48	1	40	240		
ESDHD36UF		36	38.0	5	70	1	40	350		
ESDHD03BF			3.3	4.0	8	10	1	15	80	
ESDHD05BF			5	5.5	7	11	1	15	77	
ESDHD12BF			12	13.0	6	25	1	15	150	
ESDHD15BF			15	16.5	7	35	1	15	245	
ESDHD24BF			24	26.0	5	48	1	15	240	
ESDUD05BF			5	6.0	4	22	0.1	0.5	88	
ESDUDS03BF			3.3	3.6	5	10	1	0.4	50	
ESDUDS05BF			5	5.6	5	10	1	0.4	50	
DFN2510 Package:										
ESDALD05UG4		5	6.0	4	15	0.1	1	60		
ESDAUDS03UG4		3.3	3.6	4	8	1	0.58	32		
ESDAUDS05UG4		5	5.6	4	8	1	0.58	32		
SOD523 Package:										
ESDHD03UB		3.3	4.0	25	12	1	180	300		
ESDHD05UB		5	5.9	16	15	1	160	240		
ESDHD12UB		12	13.3	7	30	1	80	210		
ESDHD15UB		15	16.5	6	35	1	40	210		
ESDHD24UB		24	25.9	4	48	1	30	192		
ESDHD36UB		36	38.0	3	70	1	20	210		
ESDHD03BB		3.3	3.7	10	9	1	15	90		
ESDHD05BB		5	5.6	9	10	1	15	90		

03 Silicon Carbides

#Selection Guide
选型手册

2026 WeEn Semiconductors

All rights reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use. Publication thereof does not convey nor imply any license under patent- or other industrial or intellectual property rights.

Date of release: March, 2026

Document order number: 20260301



Follow us on WeChat



Follow us on LinkedIn



2026





WeEn
WeEn Semiconductors

Power Efficiency
for A Cooler Planet

03

Silicon Carbide

SiC MOSFET

SiC Diode G5

SiC Diode G6

SiC Diode G2

SiC Diode Auto Grade

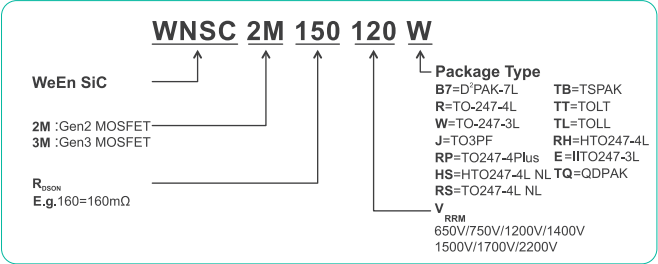
SiC MOSFETs Auto Grade

SiC Diode Bare die

SiC MOSFET Bare Die

SiC Power Module Product

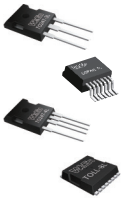
SiC MOSFET



In the spotlight

Gen-2 SiC MOSFET

- High Threshold Voltage ~2.6V@ 25°C (2V@ 125°C) Capable of 15-18V gate-drive voltage
- Gate driving voltage ~12-24V, reliability
- conrmed Improved Crss/Ciss ratio.
- Low thermal resistance
- High Blocking Voltage
- Low Rdson-TJ coecient



V_{RRM} (V)	V_{th}	$R_{DS(on)}$ (typ) @15Vgs@ 25°C (mΩ)	$R_{DS(on)}$ (typ) @18Vgs@ 25°C (mΩ)	T_J (max) (°C)	Qualication	TO247-3L	IITO247-3L	TO247-4L	TO247-4L NL	HTO247-4L	HTO247-4L NL	TO263-7L (D ² PAK-7L)	TSPAK	TOLT	TOLL
650	2.6	12	9.5	175	Industrial			WNSC2M12065R	WNSC2M12065RS			WNSC2M12065B7			WNSC2M12065TL
650	2.6	15	12	175	Industrial	WNSC2M15065W		WNSC2M15065R	WNSC2M15065RS			WNSC2M15065B7			
650	2.6	19	15	175	Industrial			WNSC2M19065R	WNSC2M19065RS			WNSC2M19065B7	WNSC2M19065TB	WNSC2M19065TT	WNSC2M19065TL
650	2.6	25	20	175	Industrial	WNSC2M25065W		WNSC2M25065R	WNSC2M25065RS			WNSC2M25065B7		WNSC2M25065TT	
650	2.6	33	26	175	Industrial	WNSC2M30065W		WNSC2M30065R	WNSC2M30065RS			WNSC2M30065B7	WNSC2M30065TB		WNSC2M30065TL
650	2.6	43	34	175	Industrial	WNSC2M43065W		WNSC2M43065R	WNSC2M43065RS			WNSC2M43065B7	WNSC2M43065TB	WNSC2M43065TT	WNSC2M43065TL
650	2.6	55	44	175	Industrial	WNSC2M55065W		WNSC2M55065R	WNSC2M55065RS			WNSC2M55065B7		WNSC2M55065TT	WNSC2M55065TL
650	2.6	75	60	175	Industrial	WNSC2M70065W	WNSC2M70065E	WNSC2M70065R	WNSC2M70065RS			WNSC2M70065B7		WNSC2M70065TT	
650	2.6	95	75	175	Industrial	WNSC2M100065W		WNSC2M100065R	WNSC2M100065RS			WNSC2M100065B7			WNSC2M100065TL
650	2.6	135	108	175	Industrial	WNSC2M140065W						WNSC2M140065B7			WNSC2M140065TL
750	2.6	12	9.5	175	Industrial			WNSC2M12075R	WNSC2M12075RS						
750	2.6	15	12	175	Industrial			WNSC2M15075R	WNSC2M15075RS						
750	2.6	20	16	175	Industrial			WNSC2M20075R	WNSC2M20075RS						
750	2.6	25	20	175	Industrial			WNSC2M25075R	WNSC2M25075RS						
750	2.6	33	26	175	Industrial			WNSC2M30075R	WNSC2M30075RS						
750	2.6	43	34	175	Industrial			WNSC2M43075R	WNSC2M43075RS						
750	2.8	52	40	175	Industrial					WNSC2M50075RH-D					
750	2.6	55	44	175	Industrial			WNSC2M55075R	WNSC2M55075RS						
750	2.6	70	55	175	Industrial					WNSC2M70075RH-D					
750	2.6	75	60	175	Industrial			WNSC2M70075R	WNSC2M70075RS						
750	2.6	95	75	175	Industrial			WNSC2M100075R	WNSC2M100075RS						
1200	2.6	12	10	175	Industrial			WNSC2M12120R	WNSC2M12120RS					WNSC2M12120TB	
1200	2.6	20	17	175	Industrial			WNSC2M20120R	WNSC2M20120RS			WNSC2M20120B7		WNSC2M20120TB	
1200	2.6	30	26	175	Industrial			WNSC2M30120R	WNSC2M30120RS	WNSC2M30120RH	WNSC2M30120HS	WNSC2M30120B7		WNSC2M30120TB	
1200	2.6	40	35	175	Industrial	WNSC2M40120W		WNSC2M40120R/R-D	WNSC2M40120RS	WNSC2M40120RH		WNSC2M40120B7		WNSC2M40120TB	
1200	2.6	60	51	175	Industrial	WNSC2M60120W		WNSC2M60120R	WNSC2M60120RS			WNSC2M60120B7			
1200	2.6	75	64	175	Industrial	WNSC2M75120W		WNSC2M75120R	WNSC2M75120RS			WNSC2M75120B7		WNSC2M75120TB	
1200	2.6	150	128	175	Industrial	WNSC2M150120W		WNSC2M150120R	WNSC2M150120RS			WNSC2M150120B7		WNSC2M150120TB	
1400	2.6	12	10	175	Industrial					WNSC2M12140RH					
1400	2.6	20	17	175	Industrial			WNSC2M20140R		WNSC2M20140RH					
1400	2.6	30	26	175	Industrial			WNSC2M30140R		WNSC2M30140RH					
1400	2.6	40	35	175	Industrial			WNSC2M40140R/R-D		WNSC2M40140RH	WNSC2M40140HS				
1400	2.6	150	128	175	Industrial			WNSC2M150140R		WNSC2M150140RH					

1700V-2.6
High Power

1700V-3.1
Easy drive

2200V-3.3
High surge Sys

V_{RRM} (V)	V_{th} (V)	$R_{DS(on)}$ (typ) @12Vgs@ 25°C (mΩ)	$R_{DS(on)}$ (typ) @15Vgs@ 25°C (mΩ)	$R_{DS(on)}$ (typ) @18Vgs@ 25°C (mΩ)	T_J (max) (°C)	Qualication	TO247-3L	TO247-4Plus	TO3PF	HTO247-4L	TO263-7L (D ² PAK-7L)
1700	2.6	-	23.5	20	175	Industrial				WNSC2M25170RH	
1700	2.6	-	35.3	30	175	Industrial	WNSC2M35170W			WNSC2M35170RH	WNSC2M35170B7
1700	2.6	-	47.1	40	175	Industrial				WNSC2M45170RH	
1700	2.6	-	76.5	65	175	Industrial				WNSC2M75170RH	WNSC2M75170B7
1700	3.1	250	160	140	175	Industrial	WNSC2M160170W			WNSC2M160170RH	WNSC2M160170B7
1700	3.1	550	360	290	175	Industrial	WNSC2M360170W				WNSC2M360170B7
1700	3.1	700	450	400	175	Industrial	WNSC2M450170W				WNSC2M450170B7
1700	3.1	920	650	550	175	Industrial	WNSC2M800170W				WNSC2M800170B7
1700	3.2	-	1000	750	175	Industrial	WNSC2M1K0170W		WNSC2M800170J WNSC2M1K0170J		WNSC2M1K0170B7
2200	3.2	-	14	12	175	Industrial		WNSC2M15220RP		WNSC2M15220RH	
2200	3.2	-	28	24	175	Industrial		WNSC2M30220RP		WNSC2M30220RH	
2200	3.2	-	40	35	175	Industrial		WNSC2M40220RP		WNSC2M40220RH	
2200	3.2	-	59	50	175	Industrial		WNSC2M60220RP		WNSC2M60220RH	
2200	3.2	-	90	75	175	Industrial		WNSC2M90220RP		WNSC2M90220RH	
2200	3.2	-	117	100	175	Industrial		WNSC2M120220RP		WNSC2M120220RH	

Gen3 SiC MOSFET

In the spotlight

Gen-3 SiC MOSFET

High Threshold Voltage ~2.6V@ 25°C (2V@ 125°C) Capable of 15-18V gate-drive voltage

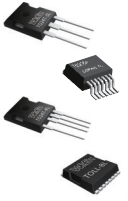
Gate driving voltage -12~24V, reliability

conrmed Improved Crss/Ciss ratio.

Low thermal resistance

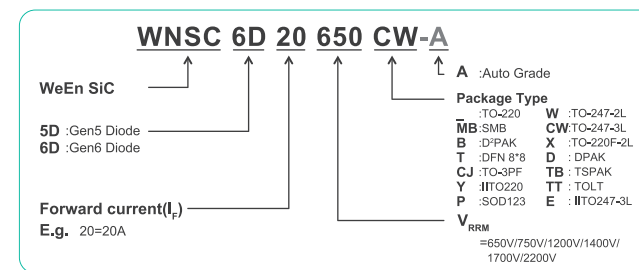
High Blocking Voltage

Low Rdson-Tj coecient



V _{RRM} (V)	V _{th}	R _{DS(on)} (typ) @15Vgs@ 25°C (mΩ)	R _{DS(on)} (typ) @18Vgs@ 25°C (mΩ)	T _j (max) (°C)	Qualication	HTO247-4Plus	TO247-4L	TO247-4L NL	HTO247-4L	HTO247-4L NL	TO263-7L	QDPAK
												
1200	3	7.5	6.5	175	Industrial	WNSC3M6R5120PR						
1200	3	14	12	175	Industrial		WNSC3M12120R	WNSC3M12120RS	WNSC3M12120RH	WNSC3M12120HS	WNSC3M12120B7	WNSC3M12120TQ
1200	2.6	23	18	175	Industrial		WNSC3M18120R	WNSC3M18120RS	WNSC3M18120RH	WNSC3M18120HS	WNSC3M18120B7	WNSC3M18120TQ
1200	2.6	34	29	175	Industrial		WNSC3M30120R	WNSC3M30120RS	WNSC3M30120RH	WNSC3M30120HS	WNSC3M30120B7	WNSC3M30120TQ
1200	2.6	40	35	175	Industrial		WNSC3M35120R	WNSC3M35120RS	WNSC3M35120RH	WNSC3M35120HS	WNSC3M35120B7	WNSC3M35120TQ
1200	2.6	66	52	175	Industrial		WNSC3M55120R	WNSC3M55120RS	WNSC3M55120RH	WNSC3M55120HS	WNSC3M55120B7	WNSC3M55120TQ
1200	2.6	92	72	175	Industrial		WNSC3M75120R	WNSC3M75120RS	WNSC3M75120RH	WNSC3M75120HS	WNSC3M75120B7	WNSC3M75120TQ
1400	2.6	15	12.5	175	Industrial		WNSC3M12140R	WNSC3M12140RS	WNSC3M12140RH	WNSC3M12140HS		
1400	2.6	23	18	175	Industrial		WNSC3M18140R	WNSC3M18140RS	WNSC3M18140RH	WNSC3M18140HS		
1400	2.6	34	29	175	Industrial		WNSC3M30140R	WNSC3M30140RS	WNSC3M30140RH	WNSC3M30140HS		
1400	2.6	40	35	175	Industrial		WNSC3M35140R	WNSC3M35140RS	WNSC3M35140RH	WNSC3M35140HS		
1500	3.1	16.2	12.7	175	Industrial			WNSC3M13150RS	WNSC3M13150RH	WNSC3M13150HS		
1500	3.1	23	20	175	Industrial			WNSC3M20150RS	WNSC3M20150RH	WNSC3M20150HS		
1500	2.6	36	32	175	Industrial			WNSC3M32150RS	WNSC3M32150RH	WNSC3M32150HS		
1500	2.6	40	35	175	Industrial			WNSC3M35150RS	WNSC3M35150RH	WNSC3M35150HS		
1500	2.6	70	56	175	Industrial		WNSC3M55150R	WNSC3M55150RS	WNSC3M55150RH	WNSC3M55150HS	WNSC3M55150B7	WNSC3M55150TQ
1500	2.6	97	77	175	Industrial		WNSC3M75150R	WNSC3M75150RS	WNSC3M75150RH	WNSC3M75150HS	WNSC3M75150B7	WNSC3M75150TQ

SiC Diode G5 650V



In the spotlight

Highly stable switching performance
High forward surge capability IFSM
Extremely fast reverse recovery time
Superior in efficiency to Silicon Diode alternatives
Reduced losses in associated MOSFET
Reduced EMI
Reduced cooling requirements
RoHS compliant



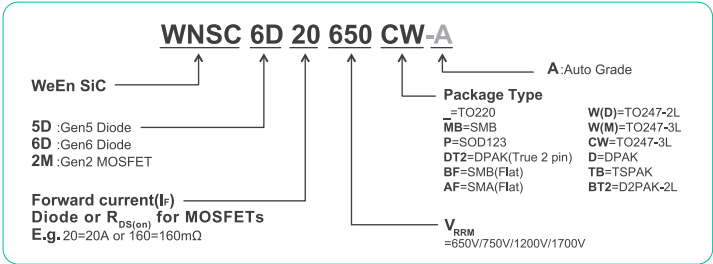
V _{RRM} (V)	I _{F(AV)} (A)	V _F @I _F (typ) @25°C (V)	Q _r (typ) @ 25°C (nC)	TO220-2L True 2 pin	I ² TO220	TO220F-2L	TO247-2L True 2 pin	TO247-3L	TO-3PF	SOT428 (DPAK)	TO263-2L (D ² PAK-2L)	DFN 8x8
												
650	4	1.45	6.5	WNSC5D04650	WNSC5D04650Y	WNSC5D04650X				WNSC5D04650D		WNSC5D04650T
650	6	1.45	9	WNSC5D06650	WNSC5D06650Y	WNSC5D06650X				WNSC5D06650D		WNSC5D06650T
650	8	1.45	12	WNSC5D08650	WNSC5D08650Y	WNSC5D08650X				WNSC5D08650D		WNSC5D08650T
650	10	1.45	14.5	WNSC5D10650	WNSC5D10650Y	WNSC5D10650X	WNSC5D10650W			WNSC5D10650D	WNSC5D10650B	WNSC5D10650T
650	12	1.45	18	WNSC5D12650	WNSC5D12650Y							WNSC5D12650T
650	20	1.45	30	WNSC5D20650		WNSC5D20650X	WNSC5D20650W					
650	30	1.45	48				WNSC5D30650W					
650	2 x 8	1.5	12					WNSC5D16650CW	WNSC5D16650CJ			
650	2 x 10	1.5	14.5					WNSC5D20650CW	WNSC5D20650CJ			
650	2 x 15	1.45	24					WNSC5D30650CW				

In the spotlight

BV > 800V & Ultra low Ir(<10uA)
Ultra low Vf (1.26V nominal)
Ag sinter welding technology
Ultra thin wafer, Low Ron & Low Rth
Very wide portfolio

[illegible]

SiC Diode Auto Grade



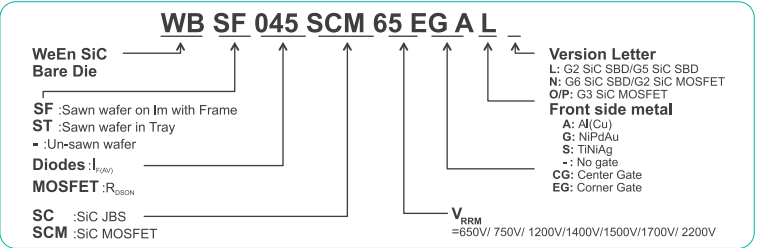
V _{RRM} (V)	I _{F(AV)} (A)	V _F @I _F (typ) @25°C (V)	Qualification	SOD59A (TO220-2L) True 2 pin	TO247-2L (True 2 pin)	SOT429 (TO247-3L)	SOD123	SMA Flat	SMB	SMB Flat	DPAK (True 2 pin)	TO252 DPAK	TO263-2L (D ² PAK-2L) True 2 pin	TSPAK
														
650	2	1.3	Automotive				WNSC6D02650P-A					WNSC6D02650D-A		
650	10	1.45	Automotive		WNSC5D10650W-A									
650	10	1.26	Automotive	WNSC6D10650-A								WNSC6D10650D-A	WNSC6D10650BT2-A	
650	20	1.26	Automotive	WNSC6D20650-A	WNSC6D20650W-A								WNSC6D20650BT2-A	
650	30	1.26	Automotive										WNSC6D30650BT2-A	
650	2x10	1.26	Automotive			WNSC6D20650CW-A								
650	2x15	1.26	Automotive			WNSC6D30650CW-A								
650	2x20	1.26	Automotive			WNSC6D40650CW-A								
750	10	1.26	Automotive											WNSC6D10750TB-A
750	20	1.26	Automotive											WNSC6D20750TB-A
1200	1	1.21	Automotive				WNSC2D011200P-A							
1200	2	1.42	Automotive					WNSC2D021200AF-A	WNSC2D021200MB	WNSC2D021200BF-A	WNSC2D021200DT2-A			
1200	10	1.42	Automotive	WNSC2D101200-A	WNSC2D101200W-A								WNSC2D101200BT2-A	
1200	15	1.42	Automotive										WNSC2D151200BT2-A	
1200	20	1.45	Automotive	WNSC2D201200-A	WNSC2D201200W-A								WNSC2D201200BT2-A	
1200	30	1.45	Automotive											
1200	2x10	1.42	Automotive			WNSC2D201200CW-A								
1200	2x15	1.42	Automotive			WNSC2D301200CW-A								
1200	2x20	1.42	Automotive			WNSC2D401200CW-A								

SiC MOSFETs Auto Grade

V _{BRDS} (V)	V _{th} (A)	R _{DS(on)} (typ) @15Vgs@ 25°C (mΩ)	R _{DS(on)} (typ) @18Vgs@ 25°C (mΩ)	T _j (max)	Qualication	SOT429 (TO247-3L)	SOT429 (TO247-4L)	TO263-7L (D ² PAK-7L)	TSPAK
									
750	2.8	13	10	175	Automotive		WNSC2M13075R-A		
750	2.8	20	15	175	Automotive		WNSC2M20075R-A	WNSC2M20075B7-A	
750	2.8	24	19	175	Automotive		WNSC2M25075R-A	WNSC2M25075B7-A	WNSC2M25075TB-A
750	2.8	30	24	175	Automotive	WNSC2M30075W-A	WNSC2M30075R-A	WNSC2M30075B7-A	WNSC2M30075TB-A
750	2.8	40	31	175	Automotive	WNSC2M40075W-A	WNSC2M40075R-A	WNSC2M40075B7-A	WNSC2M40075TB-A
750	2.8	50	38.5	175	Automotive	WNSC2M50075W-A	WNSC2M50075R-A	WNSC2M50075B7-A	WNSC2M50075TB-A
750	2.8	70	55	175	Automotive	WNSC2M70075W-A	WNSC2M70075R-A	WNSC2M70075B7-A	WNSC2M70075TB-A
1200	2.6	12	10	175	Automotive			WNSC2M12120TB-A	
1200	2.6	20	17	175	Automotive		WNSC2M20120R-A	WNSC2M20120B7-A	WNSC2M20120TB-A
1200	2.6	30	26	175	Automotive		WNSC2M30120R/RA-A	WNSC2M30120B7-A	WNSC2M30120TB-A
1200	2.6	40	35	175	Automotive		WNSC2M40120R-A	WNSC2M40120B7-A	WNSC2M40120TB-A
1200	2.6	60	51	175	Automotive	WNSC2M60120W-A	WNSC2M60120R-A	WNSC2M60120B7-A	WNSC2M60120TB-A
1200	2.6	75	64	175	Automotive	WNSC2M75120W-A	WNSC2M75120R-A	WNSC2M75120B7-A	WNSC2M75120TB-A
1200	2.6	150	128	175	Automotive	WNSC2M150120W-A	WNSC2M150120R-A	WNSC2M150120B7-A	WNSC2M150120TB-A
1700	3.2	1000	750	175	Automotive	WNSC2M1K0170W-A		WNSC2M1K0170B7-A	

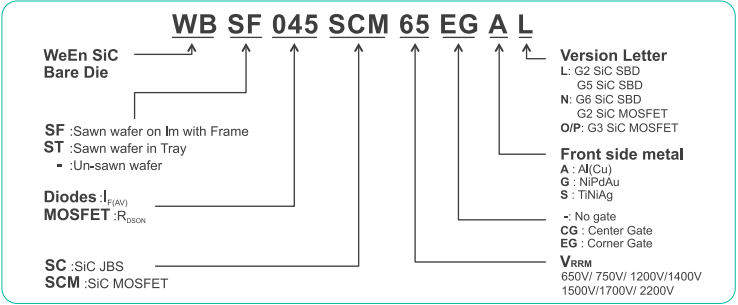
SiC DIODE Bare die

"x" for Front Side Metal - A : Al(Cu), G: NiPdAu, S: TiNiAg



V _{RRM} (V)	I _F (A)	V _F @I _F (typ)@ 25°C (V)	Part Number	Description
650	4	1.45	WB04SC65xL	G6 SiC diode / 650V / 4A
650	6	1.45	WB06SC65xL	G5 SiC diode / 650V / 6A
650	8	1.45	WB08SC65xL	G5 SiC diode / 650V / 8A
650	10	1.45	WB10SC65xL	G5 SiC diode / 650V / 10A
650	12	1.45	WB12SC65xL	G5 SiC diode / 650V / 12A
650	20	1.45	WB20SC65xL	G5 SiC diode / 650V / 20A
650	30	1.45	WB30SC65xL	G5 SiC diode / 650V / 30A
650	1	1.15	WB01SC65xN	G5 SiC diode / 650V / 1A
650	2	1.26	WB02SC65xN	G5 SiC diode / 650V / 2A
650	4	1.26	WB04SC65xN	G6 SiC diode / 650V / 4A
650	6	1.26	WB06SC65xN	G6 SiC diode / 650V / 6A
650	8	1.26	WB08SC65xN	G6 SiC diode / 650V / 8A
650	10	1.29	WB10SC65xN	G6 SiC diode / 650V / 10A
650	15	1.29	WB15SC65xN	G6 SiC diode / 650V / 15A
650	16	1.29	WB16SC65xN	G6 SiC diode / 650V / 16A
650	20	1.26	WB20SC65xN	G6 SiC diode / 650V / 20A
650	30	1.26	WB30SC65xN	G6 SiC diode / 650V / 30A
1200	1	1.42	WB01SC120xL	G2 SiC diode / 1200V / 1A
1200	2	1.42	WB02SC120xL	G2 SiC diode / 1200V / 2A
1200	5	1.42	WB05SC120xL	G2 SiC diode / 1200V / 5A
1200	10	1.42	WB10SC120xL	G2 SiC diode / 1200V / 10A
1200	15	1.42	WB15SC120xL	G2 SiC diode / 1200V / 15A
1200	20	1.45	WB20SC120xL	G2 SiC diode / 1200V / 20A
1200	25	1.42	WB25SC120xL	G2 SiC diode / 1200V / 25A
1200	30	1.42	WB30SC120xL	G2 SiC diode / 1200V / 30A
1200	50	1.42	WB50SC120xL	G2 SiC diode / 1200V / 50A
1200	60	1.42	WB60SC120xL	G2 SiC diode / 1200V / 60A
1400	5	1.45	WB05SC140xL	G2 SiC diode / 1400V / 5A
1400	20	1.45	WB20SC140xL	G2 SiC diode / 1400V / 20A
1400	30	1.42	WB30SC140xL	G2 SiC diode / 1400V / 30A
1400	40	1.42	WB40SC140xL	G2 SiC diode / 1400V / 40A
1700	5	1.45	WB05SC170xL	G2 SiC diode / 1700V / 5A
1700	10	1.45	WB10SC170xL	G2 SiC diode / 1700V / 10A
1700	15	1.45	WB15SC170xL	G2 SiC diode / 1700V / 15A
1700	25	1.45	WB25SC170xL	G2 SiC diode / 1700V / 25A
1700	60	1.45	WB60SC170xL	G2 SiC diode / 1700V / 60A
2200	40	1.45	WB40SC170xL	G2 SiC diode / 2200V / 40A

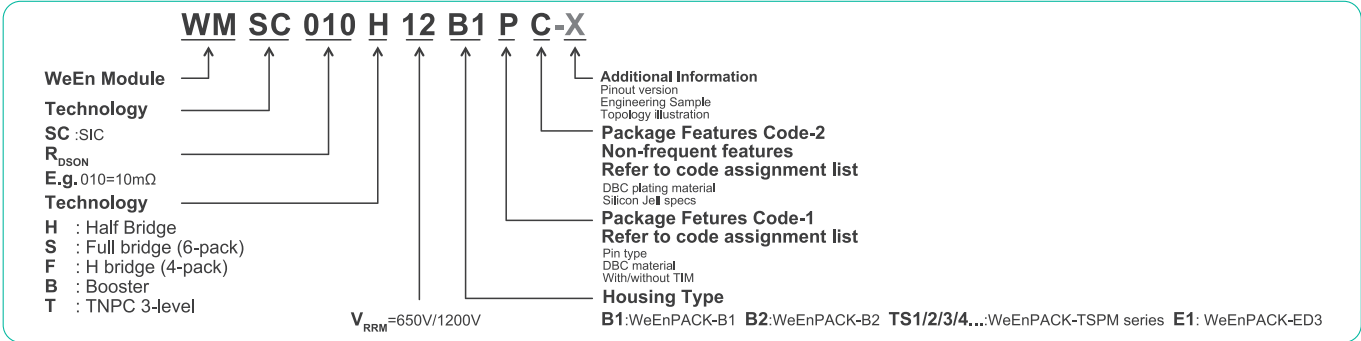
SiC MOSFET Bare Die

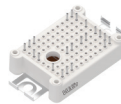
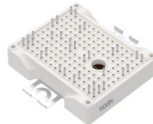
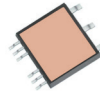


"x" for Front Side Metal - A : Al(Cu), G: NiPdAu, S: TiNiAg

V_{BRDS} (V)	V_{th} (A)	$R_{DS(ON)}$ (typ) @15Vgs@ 25°C (mΩ)	T_j (max) (°C)	Part Number	Description
650	2.6	12	175	WB012SCM65CGxN	Gen2 / SiC MOSFET / 650V / 12mΩ
650	2.6	15	175	WB015SCM65CGxN	Gen2 / SiC MOSFET / 650V / 15mΩ
650	2.6	20	175	WB020SCM65CGxN	Gen2 / SiC MOSFET / 650V / 20mΩ
650	2.6	25	175	WB025SCM65CGxN	Gen2 / SiC MOSFET / 650V / 25mΩ
650	2.6	33	175	WB030SCM65CGxN	Gen2 / SiC MOSFET / 650V / 30mΩ
650	2.6	43	175	WB043SCM65CGxN	Gen2 / SiC MOSFET / 650V / 43mΩ
650	2.6	55	175	WB055SCM65CGxN	Gen2 / SiC MOSFET / 650V / 55mΩ
650	2.6	75	175	WB070SCM65CGxN	Gen2 / SiC MOSFET / 650V / 70mΩ
650	2.6	95	175	WB100SCM65CGxN	Gen2 / SiC MOSFET / 650V / 100mΩ
650	2.6	135	175	WB140SCM65CGxN	Gen2 / SiC MOSFET / 650V / 140mΩ
750	2.8	13	175	WB013SCM75CGxN	Gen2 / SiC MOSFET / 750V / 13mΩ
750	2.8	20	175	WB020SCM75CGxN	Gen2 / SiC MOSFET / 750V / 20mΩ
750	2.8	30	175	WB030SCM75CGxN	Gen2 / SiC MOSFET / 750V / 30mΩ
750	2.8	40	175	WB040SCM75CGxN	Gen2 / SiC MOSFET / 750V / 40mΩ
750	2.8	50	175	WB050SCM75CGxN	Gen2 / SiC MOSFET / 750V / 50mΩ
750	2.8	70	175	WB070SCM75CGxN	Gen2 / SiC MOSFET / 750V / 70mΩ
1200	2.6	11	175	WB011SCM120CGxO	Gen2 / SiC MOSFET / 1200V / 11mΩ
1200	2.6	12	175	WB012SCM120CGxN	Gen2 / SiC MOSFET / 1200V / 12mΩ
1200	2.6	20	175	WB020SCM120CGxN	Gen2 / SiC MOSFET / 1200V / 20mΩ
1200	3.1	20	175	WB020SCM120CGxP	Gen2 / SiC MOSFET / 1200V / 20mΩ
1200	2.6	30	175	WB030SCM120CGxN	Gen2 / SiC MOSFET / 1200V / 30mΩ
1200	2.6	30	175	WB030SCM120CGxP	Gen2 / SiC MOSFET / 1200V / 30mΩ
1200	2.6	35	175	WB035SCM120CGxP	Gen2 / SiC MOSFET / 1200V / 35mΩ
1200	2.6	40	175	WB040SCM120CGxN	Gen2 / SiC MOSFET / 1200V / 40mΩ
1200	2.6	60	175	WB060SCM120CGxN	Gen2 / SiC MOSFET / 1200V / 60mΩ
1200	2.6	75	175	WB075SCM120CGxN	Gen2 / SiC MOSFET / 1200V / 75mΩ
1200	2.6	150	175	WB150SCM120CGxN	Gen2 / SiC MOSFET / 1200V / 150mΩ
1400	2.6	11	175	WB011SCM140CGxP	Gen2 / SiC MOSFET / 1400V / 11mΩ
1400	2.6	20	175	WB020SCM140CGxN	Gen2 / SiC MOSFET / 1400V / 20mΩ
1400	2.6	30	175	WB030SCM140CGxN	Gen2 / SiC MOSFET / 1400V / 30mΩ
1400	2.6	40	175	WB040SCM140CGxN	Gen2 / SiC MOSFET / 1400V / 40mΩ
1500	3.1	20	175	WB020SCM150CGxP	Gen2 / SiC MOSFET / 1500V / 20mΩ
1500	2.6	32	175	WB032SCM150CGxP	Gen2 / SiC MOSFET / 1500V / 32mΩ
1700	2.6	23.5	175	WB025SCM170CGxN	Gen2 / SiC MOSFET / 1700V / 25mΩ
1700	2.6	35.4	175	WB035SCM170CGxN	Gen2 / SiC MOSFET / 1700V / 35mΩ
1700	2.6	47.1	175	WB045SCM170CGxN	Gen2 / SiC MOSFET / 1700V / 45mΩ
1700	2.6	76.5	175	WB075SCM170CGxN	Gen2 / SiC MOSFET / 1700V / 75mΩ
1700	3.1	160	175	WB160SCM170CGxN	Gen2 / SiC MOSFET / 1700V / 160mΩ
1700	3.1	370	175	WB360SCM170CGxN	Gen2 / SiC MOSFET / 1700V / 360mΩ
1700	3.1	450	175	WB450SCM170CGxN	Gen2 / SiC MOSFET / 1700V / 450mΩ
1700	3.1	750	175	WB800SCM170CGxN	Gen2 / SiC MOSFET / 1700V / 800mΩ
1700	3.2	1000	175	WB1K0SCM170CGxN	Gen2 / SiC MOSFET / 1700V / 1000mΩ
2200	3.2	14	175	WB015SCM220CGxN	Gen2 / SiC MOSFET / 2200V / 15mΩ
2200	3.2	28	175	WB030SCM220CGxN	Gen2 / SiC MOSFET / 2200V / 30mΩ
2200	3.2	40	175	WB040SCM220CGxN	Gen2 / SiC MOSFET / 2200V / 40mΩ
2200	3.2	59	175	WB060SCM220CGxN	Gen2 / SiC MOSFET / 2200V / 60mΩ
2200	3.2	90	175	WB090SCM220CGxN	Gen2 / SiC MOSFET / 2200V / 90mΩ
2200	3.2	117	175	WB120SCM220CGxN	Gen2 / SiC MOSFET / 2200V / 120mΩ
1200	-	14	175	WBxx012SCM120CGxO	Gen3 / SiC MOSFET / 1200V / 12mΩ
1200	-	23	175	WBxx018SCM120CGxP	Gen3 / SiC MOSFET / 1200V / 18mΩ
1200	-	34	175	WBxx030SCM120CGxP	Gen3 / SiC MOSFET / 1200V / 30mΩ
1200	-	40	175	WBxx035SCM120CGxP	Gen3 / SiC MOSFET / 1200V / 35mΩ
1200	-	66	175	WBxx055SCM120CGxP	Gen3 / SiC MOSFET / 1200V / 55mΩ
1200	-	92	175	WBxx075SCM120CGxP	Gen3 / SiC MOSFET / 1200V / 75mΩ
1400	-	15	175	WBxx012SCM140CGxO	Gen3 / SiC MOSFET / 1400V / 12mΩ
1400	-	23	175	WBxx018SCM140CGxP	Gen3 / SiC MOSFET / 1400V / 18mΩ
1400	-	34	175	WBxx030SCM140CGxP	Gen3 / SiC MOSFET / 1400V / 30mΩ
1400	-	40	175	WBxx035SCM140CGxP	Gen3 / SiC MOSFET / 1400V / 35mΩ
1500	-	16.2	175	WBxx013SCM150CGxO	Gen3 / SiC MOSFET / 1500V / 13mΩ
1500	-	23	175	WBxx020SCM150CGxP	Gen3 / SiC MOSFET / 1500V / 20mΩ
1500	-	36	175	WBxx032SCM150CGxP	Gen3 / SiC MOSFET / 1500V / 32mΩ
1500	-	40	175	WBxx035SCM150CGxP	Gen3 / SiC MOSFET / 1500V / 35mΩ
1500	-	70	175	WBxx055SCM150CGxP	Gen3 / SiC MOSFET / 1500V / 55mΩ
1500	-	97	175	WBxx075SCM150CGxP	Gen2 / SiC MOSFET / 1500V / 75mΩ

SiC Power Module Product



Package		Conguration			Part Number	Voltage (V)	R _{DS(on)} (Typ) @18Vgs@25°C (mΩ)	R _{DS(on)} (Typ) @15Vgs@25°C (mΩ)	Remark		
WeEnPACK-B1		Half bridge		6m~40mohm, 1200V Solder pin / Press-fit pin Al2O3 / AIN DBC	WMSC6R0H12B1N-D	1200	6	8	AIN DBC, SiC SBD		
					WMSC008H12B1P(S)	1200	6	8			
					WMSC010H12B1P(S)	1200	9.5	11			
					WMSC016H12B1P(S)	1200	14	16			
					WMSC020H12B1P(S)	1200	17	20			
					WMSC030H12B1P(S)	1200	27	30			
		4 pack		20m~40mohm, 1200V Solder pin / Press-fit pin Al2O3 / AIN DBC Multiple types of Pin order Customizable	WMSC040H12B1P(S)	1200	34	40			
					WMSC020F12B1P(S)	1200	17	20			
					WMSC040F12B1P(S)	1200	34	40			
					WMSC020F12B1P(S)-B	1200	17	20			
					WMSC030F12B1P(S)-B	1200	27	30			
					WMSC040F12B1P(S)-B	1200	34	40			
		6 pack		20m~60mohm, 1200V Solder pin / Press-fit pin Al2O3 / AIN DBC Multiple types of Pin order Customizable	WMSC020S12B1P(S)	1200	17	20			
					WMSC030S12B1P(S)	1200	27	30			
					WMSC040S12B1P(S)	1200	34	40			
					WMSC040S12B1S-C	1200	34	40			
					WMSC060S12B1P(S)	1200	50	60			
					WMSC020B12B1P(S)-B	1200	17	20			
Booster	Single booster	20m~40mohm, 1200V~2200V Solder pin / Press-fit pin Al2O3 / AIN DBC customizable	WMSC020B12B1P(S)-C	1200	17	20	With Filter C, special pin order				
	Dual booster		WMSC030B12B1P(S)-C	1200	27	30					
			WMSC030B12B1P(S)-F	1200	27	30					
			WMSC040B12B1P(S)-C	1200	34	40					
			WMSC024B22P1P-C	2200	24	30					
			WMSC035B22P1P-C	2200	35	40					
	Tri booster		WMSC040B12B1P(S)-D	1200	34	40					
	WeEnPACK-B2			Half bridge	4m~8mohm, 1200V~2300V Solder pin / Press-fit pin Al2O3 / AIN DBC customizable	WMSC004H12B2P(S)		1200	3.6	4	With paralleling 60A SBD diode With unti-paralleling 90A SBD diode With unti-paralleling 90A SBD diode, Si3N4 DBC
						WMSC004H12B2P(S)-D		1200	3.6	4	
WMSC005H12B2P(S)-D		1200				4.1	5				
WMSC005H12B2M-D		1200				4.1	5				
WMSC006H12B2P(S)		1200				5.5	6				
WMSC008H12B2P(S)		1200				6.5	8				
WMSC4R0H23B2N		2300				4	5				
WMSC4R8H23B2N-D		2300				4.8	6				
WMSC6R0H23B2N-D		2300				6	7.5				
WMSC011F12B2P(S)		1200				9.5	11				
4 pack				10m~16mohm, 1200V Solder pin / Press-fit pin Al2O3 / AIN / Si3N4 DBC	WMSC016F12B2P(S)	1200	14	16	With unti-paralleling SiC SBD diode		
					WMSC020S12B2P/S	1200	17	20			
6 pack					WMSC011F12B2P(S)	1200	9.5	11			
					WMSC016F12B2P(S)	1200	14	16			
TNPC				6~15mohm, 1200V	WMSC020S12B2P/S	1200	17	20			
					WMSC6R0T12B2P	1200	7	6			
					WMSC9R0T12B2P	1200	8.3	10			
					WMSC015T12B2P	1200	13	15			
WeEnPACK-T SPM		Half bridge	Auto grade parts available Top side cooling Surface mount Temperature sensor integrated 20~75mohm, 1200V/ 650V Half bridge	WMSC045H06TS1-A	650	45	36				
				WMSC020H12TS1-A	1200	17	20				
				WMSC030H12TS1-A	1200	27	30				
				WMSC040H12TS1-A	1200	34	40				
				WMSC060H12TS1-A	1200	51	60				
				WMSC075H12TS1-A	1200	64	75				
WeEn PACK-B3		Half bridge		WMSC1R5H12B3S	1200	1.5	1.8	Clamping diode configured			
		Fly Capacitor Boost INPC	For 2000VDC MPPT	WMSC2R3H12B3S	1200	2.3	2.8				
				WMSC012CB12B3U	1200						
WeEnPACK-34mm		Half bridge	For welding machine	WMSC2R4N12B3N	1200	2.4	2.8	For 1500V system, AIN DBC			
				WMSC012H12T1N	1200	16.3	20		AIN DBC		
WeEnPACK-62mm		Half bridge		WMSC012H12T1N-D	1200	16.3	20	With unti-paralleling SiC SBD diode, AIN DBC			
				WMSC1R9H12T2	1200	1.9	2.3				
				WMSC1R9H12T2N	1200	1.9	2.3				
WeEnPACK-ED3		Half bridge		WMSC7R5H17T2N-D	1700	7.5	8.8	AIN DBC, SiC SBD			
				WMSC4R0H12E1-D	1200	3	4		With unti-paralleling SiC SBD diode		
WeEnPACK-EP2		Half bridge		WMSC010H12E1-D	1200	7.3	9.5	With unti-paralleling SiC SBD diode			
				WMSC6R0F12E2	1200	6					

04 IGBTs

2026 WeEn Semiconductors

All rights reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use. Publication thereof does not convey nor imply any license under patent- or other industrial or intellectual property rights.

Date of release: March, 2026

Document order number: 20260301

#Selection Guide
选型手册



Follow us on WeChat



Follow us on LinkedIn



2026



WeEn
WeEn Semiconductors

Power Efficiency
for A Cooler Planet

04

Insulated Gate
Bipolar Transistors

IGBT Power Module Product

650V Discrete

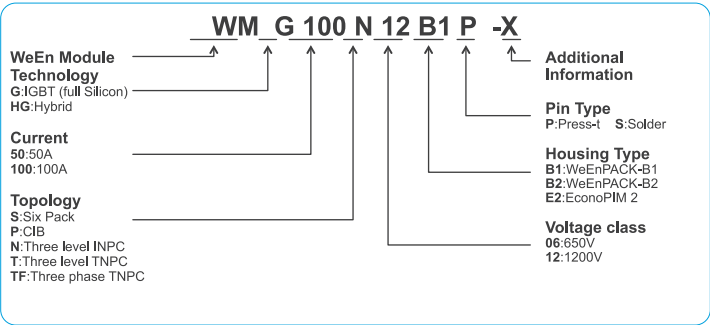
1200V Discrete

RC Discrete

IGBT Power Module Product

Types in **bold blue** represent new products

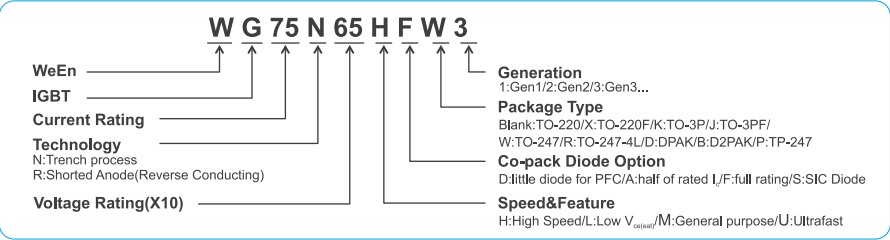
Types in **bold red italic** represent products in development



Package		Conguration	Part Number	Voltage Class (V)	Icmax (A)	Die Combination	Remark
WeEnPACK-B1		Six Pack	<i>WMG20S06B1S</i>	<i>650</i>	<i>20</i>	IGBT + FRD	
			WMG30S06B1S	650	30		
			WMG50S06B1S	650	50		
			WMG25S12B1S	1200	25		
WeEnPACK-B2		Three Level TNPC	WMG40S12B1S	1200	40		
			WMG80T12B1P	1200	40		
			<i>WMG75S06B2S</i>	<i>650</i>	<i>75</i>		
		Six Pack	<i>WMG50S12B2S</i>	<i>1200</i>	<i>50</i>		
			WMG75S12B2P	1200	75		
			WMG50S12B2P	1200	50		
		Three Level INPC	WMG50N06B2S	650	50		
			WMG75N06B2S	650	75		
			WMG100N06B2S	650	100		
			WMG150N06B2S	650	150		
			<i>WMG150N06B2S-A</i>	<i>650</i>	<i>150</i>		
			WMG75N07B2P	650	75		
			WMG100N07B2P-S	650	100		
			WMG100N07B2P	650	100		
			WMG150N07B2P	650	150		
			WMG150N07B2P-A	650	150		
			<i>WMHG150N06B2S</i>	<i>650</i>	<i>150</i>		
			<i>WMHG150N06B2S-A</i>	<i>650</i>	<i>150</i>		
			WMHG150N06B2S-B	650	150		
			<i>WMHG150N07B2P</i>	<i>650</i>	<i>150</i>		
			WMHG150N07B2P-A	650	150		
			WMHG150N07B2P-B	650	150		
			<i>WMHG200N07B2P-B</i>	<i>650</i>	<i>200</i>		
			<i>WMHG240N07B2P-B</i>	<i>650</i>	<i>240</i>		
			<i>WMHG50N06B2S</i>	<i>650</i>	<i>50</i>		
			<i>WMHG75N06B2S</i>	<i>650</i>	<i>75</i>		
			<i>WMHG100N06B2S</i>	<i>650</i>	<i>100</i>		
		Three Level TNPC	WMG50T12B2S	1200	50	IGBT + FRD	
			WMG80T12B2S	1200	80		
			WMG100T12B2S	1200	100		
			WMG150T12B2S	1200	150		
			<i>WMG80T12B2P</i>	<i>1200</i>	<i>80</i>		
			<i>WMG100T12B2P</i>	<i>1200</i>	<i>100</i>		
		Three Phase TNPC	<i>WMG150T12B2P</i>	<i>1200</i>	<i>150</i>		
			WMG25TF12B2P	1200	25	IGBT + FRD	
		CIB	WMG25P12B2S	1200	25		
			WMG35P12B2S	1200	35		
			WMG50P12B2S	1200	50		
			WMHG25P12B2S	1200	25		
			WMHG35P12B2S	1200	35	Hybrid	
			WMHG50P12B2S	1200	50		
EconoPIM 2		CIB	<i>WMG75P12E2S</i>	<i>1200</i>	<i>75</i>	IGBT + FRD	
62mm		Half bridge	<i>WMG50P12E2S</i>	<i>1200</i>	<i>50</i>		
			<i>WMG35P12E2S</i>	<i>1200</i>	<i>35</i>		
			<i>WMG25P12E2S</i>	<i>1200</i>	<i>25</i>		
			<i>WMG200H06T2S</i>	<i>650</i>	<i>200</i>		
			<i>WMG300H06T2S</i>	<i>650</i>	<i>300</i>		
			<i>WMG400H06T2S</i>	<i>650</i>	<i>400</i>		
			WMG100H12T2S	1200	100		
			WMG150H12T2S	1200	150		
			WMG200H12T2S	1200	200		
			WMG300H12T2S	1200	300		
			<i>WMG300H12T2M</i>	<i>1200</i>	<i>300</i>		Used in welding
			<i>WMG400H12T2M</i>	<i>1200</i>	<i>400</i>		Used in UPS
			<i>WMG400H12T2M</i>	<i>1200</i>	<i>400</i>		Used in welding
			<i>WMG400H12T2M</i>	<i>1200</i>	<i>400</i>		Used in UPS
SLIM(DIP26)		Six Pack	WSMG10T07MK1	650	10	IGBT + FRD + Driver IC	
			WSMG15T07MK1	650	15		
			WSMG20T07MK1	650	20		
			WSMG30T07MK1	650	30		

650V Discrete

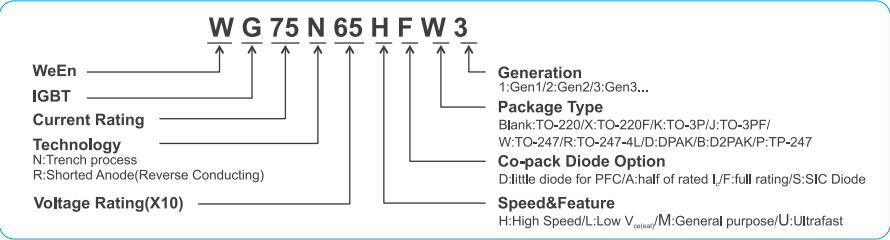
Types in **bold blue** represent new products Types in ***bold red italic*** represent products in development



Part Number	B _{Vce} (min) (V)	I _C @100°C (A)	V _{th} (typ.) @25°C (V)	V _{cesat} (typ.) @25°C (V)	E _o (typ.) @25°C (mJ)	E _{on} (typ.) @25°C (mJ)	SCWT (uS)	I _C @ 100°C (A)	Q _{rr} (typ.) @25°C (nC)	T _{jmax} (°C)	Package	TO247P-4L	TO247P	TO247-4L	IIT0247	TO247	TO3PF	TO220	TO220F	TO263
																				
WG30N65MA1	650	30	5.5	1.6	0.38	0.65	5	10	148	175	TO220							WG30N65MA1		
WG30N65MF1	650	30	5.5	1.6	0.38	0.7	5	30	221	175	TO220							WG30N65MF1		
WG30N65MAX1	650	30	5.5	1.6	0.38	0.65	5	10	148	175	TO220F								WG30N65MAX1	
WG30N65MFB1	650	30	5.5	1.6	0.38	0.7	5	30	221	175	TO263									WG30N65MFB1
WG30N65MAW1	650	30	5.5	1.6	0.38	0.65	5	10	148	175	TO247					WG30N65MAW1				
WG30N65MFW1	650	30	5.5	1.6	0.38	0.7	5	30	221	175	TO247					WG30N65MFW1				
WG30N65HA1	650	30	5.4	1.55	0.3	0.6	-	10	148	175	TO220							WG30N65HA1		
WG30N65HF1	650	30	5.4	1.55	0.3	0.8	-	30	336	175	TO220							WG30N65HF1		
WG30N65HAX1	650	30	5.4	1.55	0.3	0.6	-	10	148	175	TO220F								WG30N65HAX1	
WG30N65HFB1	650	30	5.4	1.55	0.3	0.8	-	30	336	175	TO263									WG30N65HFB1
<i>WG30N65HAJ1</i>	<i>650</i>	30	<i>5.4</i>	<i>1.55</i>	<i>0.3</i>	<i>0.6</i>	-	<i>10</i>	<i>148</i>	<i>175</i>	<i>TO3PF</i>						<i>WG30N65HAJ1</i>			
WG30N65HJ1	650	30	5.4	1.55	0.3	-	-	-	-	175	TO3PF							WG30N65HJ1		
WG30N65HFW1	650	30	5.4	1.55	0.3	0.8	-	30	336	175	TO247					WG30N65HFW1				
WG30N65HAW2	650	30	4.5	1.45	0.33	0.52	-	10	148	175	TO247					WG30N65HAW2				
WG30N65HAE1	650	30	4.5	1.45	0.33	0.52	-	10	148	175	IIT0247				WG30N65HAE1					
WG30N65HFE1	650	30	4.5	1.45	0.33	0.59	-	30	336	175	IIT0247				WG30N65HFE1					
WG30N65UAW1	650	30	4.5	1.45	0.33	0.53	-	10	148	175	TO247					WG30N65UAW1				
WG30N65UFW1	650	30	4.5	1.45	0.33	0.59	-	30	336	175	TO247					WG30N65UFW1				
WG40N65HF5	650	40	5.1	1.45	0.35	0.95	-	40	380	175	TO220							WG40N65HF5		
WG40N65HDW5	650	40	4.3	1.45	0.35	0.9	-	10	190	175	TO247					WG40N65HDW5				
WG40N65HFW5	650	40	4.3	1.45	0.35	0.9	-	40	380	175	TO247					WG40N65HFW5				
WG40N65HW5	650	40	4.3	1.45	0.35	0.9	-	-	-	175	TO247					WG40N65HW5				
<i>WG40N65MW5</i>	<i>650</i>	40								<i>175</i>	<i>TO247</i>					<i>WG40N65MW5</i>				
WG40S65MFW1	650	40	5.4	1.85	0.5	1.3	5	40	456	175	TO247					WG40S65MFW1				
WG40N65DFJ	650	40	5.1	1.5	1	1.1	6	30	221	175	TO3PF						WG40N65DFJ			
WG40N65FJ	650	40	5.1	1.5	1	-	-	-	-	175	TO3PF						WG40N65FJ			
WG40S65HFW1	650	40	5.4	1.75	0.45	1.1	-	40	300	175	TO247					WG40S65HFW1				
WG50N65LDJ1	650	50	5.1	1.25	1.24	1.69	-	10	585	175	TO3PF							WG50N65LDJ1		
<i>WG50N65LDW1</i>	<i>650</i>	50	<i>5.1</i>	<i>1.25</i>	<i>1.24</i>	<i>1.69</i>	-	<i>10</i>	<i>585</i>	<i>175</i>	<i>TO247</i>					<i>WG50N65LDW1</i>				
WG50N65LAW1	650	50	5	1.3	1.12	1.18	-	30	221	175	TO247					WG50N65LAW1				
<i>WG50N65LFW1</i>	<i>650</i>	50	<i>5</i>	<i>1.3</i>	<i>1.12</i>	<i>1.18</i>	-	<i>50</i>	<i>321</i>	<i>175</i>	<i>TO247</i>					<i>WG50N65LFW1</i>				
<i>WG50N65LDE1</i>	<i>650</i>	50	<i>5.1</i>	<i>1.25</i>	<i>1.24</i>	<i>1.69</i>	-	<i>10</i>	<i>585</i>	<i>175</i>	<i>IIT0247</i>				<i>WG50N65LDE1</i>					
<i>WG50N65MDJ1</i>	<i>650</i>	50	<i>5.4</i>	<i>1.55</i>	<i>0.72</i>	<i>2</i>	<i>5</i>	<i>10</i>	<i>585</i>	<i>175</i>	<i>TO3PF</i>						<i>WG50N65MDJ1</i>			
<i>WG50N65HDB1</i>	<i>650</i>	50	<i>4.5</i>	<i>1.55</i>	<i>0.6</i>	<i>1.1</i>	-	<i>10</i>	<i>148</i>	<i>175</i>	<i>TO263</i>									<i>WG50N65HDB1</i>
WG50N65MDW1	650	50	5.4	1.55	0.72	2	5	10	585	175	TO247					WG50N65MDW1				
WG50N65MAW1	650	50	5.4	1.55	0.72	1.37	5	30	221	175	TO247					WG50N65MAW1				
WG50N65MFW1	650	50	5.4	1.55	0.72	1.38	5	50	321	175	TO247					WG50N65MFW1				
WG50N65HDW1	650	50	4.5	1.55	0.6	1.1	-	10	148	175	TO247					WG50N65HDW1				
WG50S65HAW1	650	50	4.5	1.75	0.65	1.25	-	30	336	175	TO247					WG50S65HAW1				
WG50N65HAW1	650	50	4.5	1.55	0.6	1.3	-	30	221	175	TO247					WG50N65HAW1				
WG50S65HFW1	650	50	4.5	1.75	0.65	1.25	-	50	321	175	TO247					WG50S65HFW1				
WG50N65HFW1	650	50	4.5	1.55	0.6	1.35	-	50	321	175	TO247					WG50N65HFW1				
WG50N65HDE1	650	50	4.5	1.55	0.6	1.1	-	10	148	175	IIT0247				WG50N65HDE1					
WG50S65HFR1	650	50	5.4	1.75	0.25	0.85		50	321	175	TO247-4L			WG50S65HFR1						
WG50N65HFR1	650	50	4.5	1.55	0.35	0.95	-	50	454	175	TO247-4L			WG50N65HFR1						
WG50N65UAW1	650	50	4.5	1.35	0.65	1.3	-	30	221	175	TO247					WG50N65UAW1				
WG50N65UFW1	650	50	4.5	1.35	0.65	1.15	-	50	321	175	TO247					WG50N65UFW1				
WG50N65UFR1	650	50	4.5	1.35	0.35	0.8	-	50	454	175	TO247-4L			WG50N65UFR1						
WG60N65MFW1	650	60	5.4	1.7	0.9	2	5	50	321	175	TO247					WG50N65MFW1				

650V Discrete

Types in **bold blue** represent new products Types in **bold red italic** represent products in development

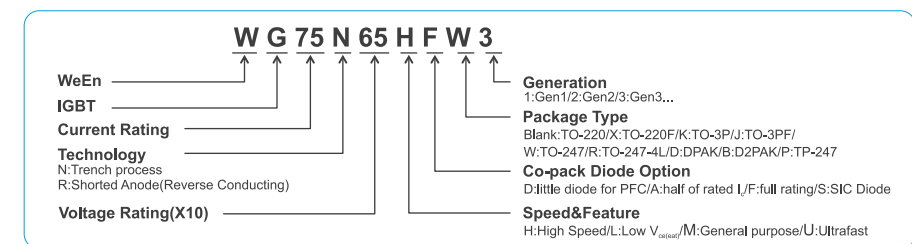


Part Number	B _{Vce} (min) (V)	I _C @100°C (A)	V _{th} (typ.) @25°C (V)	V _{cesat} (typ.) @25°C (V)	E _o (typ.) @25°C (mJ)	E _{on} (typ.) @25°C (mJ)	SCWT (uS)	I _F @ 100°C (A)	Q _{rr} (typ.) @25°C (nC)	T _{jmax} (°C)	Package	TO247P-4L	TO247P	TO247-4L	IITO247	TO247	TO3PF	TO220	TO220F	TO263
																				
WG60N65HAW1	650	60	5.2	1.7	0.84	1.3	-	30	221	175	TO247					WG60N65HAW1				
WG60S65HFW1	650	60	4.5	1.75	0.65	1.25	-	50	321	175	TO247					WG60S65HFW1				
WG60N65HFW1	650	60	5.2	1.7	0.84	1.8	-	50	321	175	TO247					WG60N65HFW1				
WG75S65MFW1	650	75	5.3	1.9	1.2	3.4	-	75	617	175	TO247					WG75S65MFW1				
WG75N65MFW1	650	75	4.8	1.5	1.4	2.5	-	75	871	175	TO247					WG75N65MFW1				
WG75N65MAW1	650	75	4.8	1.5	1.4	2.25	-	30	221	175	TO247					WG75N65MAW1				
WG75N65MFR1	650	75	4.8	1.5	1.05	1.35	-	75	871	175	TO247-4L			WG75N65MFR1						
WG75N65HDJ1	650	75	4.3	1.5	1.25	1.85	-	10	148	175	TO3PF						WG75N65HDJ1			
WG75N65HAW1	650	75	4.3	1.5	1.2	1.9	-	30	221	175	TO247					WG75N65HAW1				
WG75S65HFW1	650	75	5	1.5	1.95	3.15	-	75	221	175	TO247					WG75S65HFW1				
WG75N65HFW1	650	75	4.3	1.5	1.2	2.3	-	75	910	175	TO247					WG75N65HFW1				
WG75N65HFW2	650	75	4.3	1.5	1.2	2.3	-	75	910	175	TO247					WG75N65HFW2				
WG75N65HFR1	650	75	4.3	1.5	0.6	1.2	-	75	910	175	TO247-4L			WG75N65HFR1						
WG75N65UAW1	650	75	4.2	1.4	1.3	1.9	-	30	221	175	TO247					WG75N65UAW1				
WG75S65UFW1	650	75	4.5	1.55	1.1	2.15	-	75	910	175	TO247					WG75S65UFW1				
WG75N65UFW1	650	75	4.2	1.4	1.25	2.15	-	75	910	175	TO247					WG75N65UFW1				
WG75N65UFR1	650	75	4.2	1.4	0.7	1.05	-	75	910	175	TO247-4L			WG75N65UFR1						
WG100N65MFW1	650	100	5	1.55	2.3	4.4	5	100	1082	175	TO247					WG100N65MFW1				
WG100N65MAW1	650	100	5	1.5	1.8	2.86	5	50	286	175	TO247			WG100N65MAW1						
WG100N65MFP1	650	100	5	1.5	1.8	3.25	5	100	132	175	TO247P		WG100N65MFP1							
WG100N65MFPR1	650	100	5	1.5	1.8	3.25	5	100	1132	175	TO247P-4L	WG100N65MFPR1								
WG100N65HFW1	650	100	4.4	1.45	1.3	3.4	-	100	1139	175	TO247					WG100N65HFW1				
WG100N65HAW1	650	100	4.5	1.5	1.56	2.86	-	50	286	175	TO247			WG100N65HAW1						
WG100N65HFP1	650	100	4.5	1.5	1.56	3.25	-	100	1132	175	TO247P		WG100N65HFP1							
WG100N65HFR1	650	100	4.5	1.5	1.56	3.25	-	100	1132	175	TO247-4L			WG100N65HFR1						
WG100S65UFR1	650	100	4.5	1.6	0.9	1.5	-	100	1710	175	TO247-4L			WG100S65UFR1						
WG100N65HFPR1	650	100	4.5	1.5	1.56	3.25	-	100	1132	175	TO247P-4L	WG100N65HFPR1			WG100S65UFR1					
WG120N65MAW1	650	120	5	1.5	2.1	3.3	5	50	286	175	TO247			WG120N65MAW1						
WG120N65MFW1	650	120	5	1.55	2.4	5.7	5	120	949	175	TO247					WG120N65MFW1				
WG120N65MFP1	650	120	5	1.5	2.1	3.75	5	100	1132	175	TO247P		WG120N65MFP1							
WG120N65MFPR1	650	120	5	1.5	2.1	3.75	5	100	1132	175	TO247P	WG120N65MFPR1								
WG120N65HAR1	650	120	4.3	1.45	1.05	2.5	-	75	910	175	TO247-4L			WG120N65HAR1						
WG120N65HFR1	650	120	4.5	1.5	1.3	2.2	-	120	2505	175	TO247-4L			WG120N65HFR1						
WG120N65HFW1	650	120	4.3	1.5	1.6	4.2	-	120	1287	175	TO247					WG120N65HFW1				
WG120N65HAW1	650	120	4.5	1.5	1.8	3.3	5	50	286	175	TO247					WG120N65HAW1				
WG120N65HFP1	650	120	4.5	1.5	1.8	3.75	5	100	1132	175	TO247P		WG120N65HFP1							
WG120N65HFPR1	650	120	4.5	1.5	1.8	3.75	5	100	1132	175	TO247P-4L	WG120N65HFPR1								
WG160S65HFP1	650	160	4.5	1.75	2.3	2.9	-	160	1659	175	TO247P		WG160S65HFP1							
WG160N65HFP1	650	160	4.5	1.5	2.4	7	-	160	1301	175	TO247P		WG160N65HFP1							
WG160S65HFPR1	650	160	4.5	1.75	2.3	2.9	-	160	1659	175	TO247P-4L	WG160S65HFPR1								
WG160N65HFPR1	650	160	4.5	1.5	1.8	2.4	-	160	3122	175	TO247P-4L	WG160N65HFPR1								

1200V Discrete

Part Number	B _{Vce} (min) (V)	I _c @100°C (A)	V _{th} (typ.) @25°C (V)	V _{cesat} (typ.) @25°C (V)	E _s (typ.) @25°C (mJ)	E _{on} (typ.) @25°C (mJ)	SCWT (uS)	I _c @ 100°C (A)	Q _{rr} (typ.) @25°C (nC)	T _{jmax} (°C)	Package	TO247P-4L	TO247P	TO247-4L	IIT0247	TO247	TO3PF	TO220	TO220F	TO263	TO252
WG15N120MFW1	1200	15	5.7	1.55	0.6	0.7	10	12	860	175	TO247					WG15N120MFW1					
WG15N120HFW1	1200	15	5.2	1.65	0.45	0.6	-	15	670	175	TO247					WG15N120HFW1					
WG25N120MFB1	1200	25	5.7	1.55	0.9	1.35	-	20	1003	175	TO263					WG25N120MFB1					
WG25N120MAW1	1200	25	5.6	1.65	1.2	1.15	10	12	565	175	TO247					WG25N120MAW1					
WG25N120MFW1	1200	25	5.7	1.55	0.9	1.35	10	20	1003	175	TO247					WG25N120MFW1					
WG25N120HAB1	1200	25	5.3	1.7	0.8	1.1	-	12	860	175	TO263					WG25N120HAB1					
WG25N120HFW1	1200	25	5.3	1.7	0.8	1.35	-	20	1003	175	TO247					WG25N120HFW1					
WG40N120MAW1	1200	40	5.3	1.68	1.7	2.35	10	20	1003	175	TO247					WG40N120MAW1					
WG40N120MFW1	1200	40	5.3	1.68	1.7	2.5	10	40	1660	175	TO247					WG40N120MFW1					
WG40N120HAW1	1200	40	5.3	2.2	1	2.25	10	20	1003	175	TO247					WG40N120HAW1					
WG40N120HFW1	1200	40	5.3	2.2	1	2.5	10	40	1660	175	TO247					WG40N120HFW1					
WG40N120HFR1	1200	40	5.3	2.2	0.9	1.2	10	40	1660	175	TO247-4L			WG40N120HFR1							
WG40N120UFW1	1200	40	5.3	1.75	1.1	2	-	40	1950	175	TO247					WG40N120UFW1					
WG40N120UAW1	1200	40	5.3	1.75	1.15	1.85	-	20	1003	175	TO247					WG40N120UAW1					
WG40N120UAR1	1200	40	5.3	1.75	0.88	1.2	-	40	1950	175	TO247-4L			WG40N120UAR1							
WG40N120UFR1	1200	40	5.3	1.75	0.88	1.2	-	40	1950	175	TO247-4L			WG40N120UFR1							
WG75N120MAW1	1200	75	5.7	1.55	4	5.4	10	40	1747	175	TO247					WG75N120MAW1					
WG75N120MFP1	1200	75	5.7	1.55	4	6.2	10	75	2370	175	TO247P		WG75N120MFP1								
WG75N120MFPR1	1200	75	5.7	1.55	3.2	5	10	75	2370	175	TO247P-4L	WG75N120MFPR1									
WG75N120HAW1	1200	75	6.1	1.65	1.95	4.9	-	40	1967	175	TO247					WG75N120HAW1					
WG75N120HFP1	1200	75	6.1	1.65	1.95	5.1	-	75	1840	175	TO247P		WG75N120HFP1								
WG75N120HFPR1	1200	75	6.1	1.65	1.5	3.06	-	75	1840	175	TO247P-4L	WG75N120HFPR1									
WG100S120MFP1	1200	100	5.7	1.75	4.5	10.2	10	100	3140	175	TO247P		WG100S120MFP1								
WG100N120MFP1	1200	100	5.7	1.75	4.5	10.2	10	100	3140	175	TO247P			WG100N120MFP1							
WG100N120MFPR1	1200	100	5.7	1.75	3.6	6.12	10	100	3140	175	TO247P-4L	WG100N120MFPR1									
WG100S120HFP1	1200	100	6	1.85	2.5	7.85	-	100	1690	175	TO247P		WG100S120HFP1								
WG100N120HFP1	1200	100	6	1.85	2.5	7.85	-	100	1690	175	TO247P			WG100N120HFP1							
WG100N120HFPR1	1200	100	6	1.85	2	4.71	-	100	1690	175	TO247P-4L	WG100N120HFPR1									
WG140N120HAP1	1200	140	5	1.75	3.7	11.6	-			175	TO247P			WG140N120HAP1							
WG140N120HFP1	1200	140	5	1.75	3.7	11.6	-	140	2200	175	TO247P			WG140N120HFP1							
WG140N120HFPR1	1200	140	6	1.75	3.6	4.1	-	140	5830	175	TO247P-4L	WG140N120HFPR1									

RC Discrete



Types in **bold blue** represent new products

Part Number	B _{Vce} (min) (V)	I _C @100°C (A)	V _{th} (typ.) @25°C (V)	V _{cesat} (typ.) @25°C (V)	E _o (typ.) @25°C (mJ)	E _{on} (typ.) @25°C (mJ)	SCWT (uS)	I _r @ 100° C (A)	Q _r (typ.) @25°C (nC)	T _{jmax} (°C)	Package	TO247P-4L	TO247P	TO247-4L	IITO247	TO247	TO3PF	TO220	TO220F	TO263	TO252
																					
WG06R65D5	650	6	5	1.5	0.063	-	5	6	0.3	175	TO252										
WG30R65W5	650	30	4.2	1.5	0.31	0.58	-	15	511	175	TO247					WG30R65W5					WG06R65D5
WG30R110W1	1100	30	5.5	1.6	0.042	-	-	30	-	175	TO247					WG30R110W1					
WG20R135W1	1350	20	5.5	1.8	0.054	-	-	20	-	175	TO247					WG20R135W1					
WG25R135W1	1350	25	5.5	1.85	0.078	-	-	25	-	175	TO247					WG25R135W1					
WG30R135W1	1350	30	5.75	1.7	0.129	-	-	30	-	175	TO247					WG30R135W1					
WG30R140W1	1400	30	5.6	1.8	0.13	-	-	30	-	175	TO247					WG30R140W1					

05 MOSFETs

2026 WeEn Semiconductors

All rights reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use. Publication thereof does not convey nor imply any license under patent- or other industrial or intellectual property rights.

Date of release: March, 2026

Document order number: 20260301

#Selection Guide
选型手册



Follow us on WeChat



Follow us on LinkedIn



2026



Power Efficiency
for A Cooler Planet

05

MOSFETs

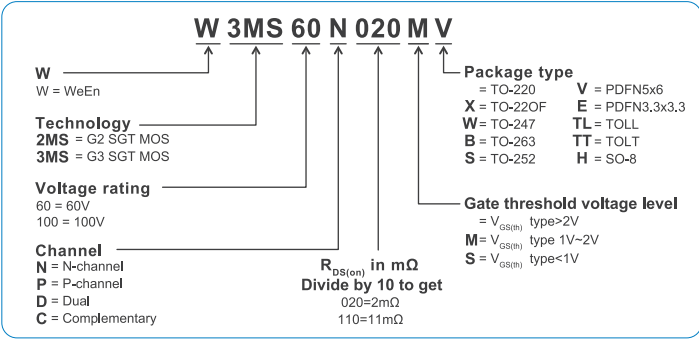
MOSFETs (LV & MV)

MOSFETs (HV)

MOSFETs (LV & MV)

Types in **bold blue** represent new products
Types in **bold red italic** represent products in development

LV / MV MOSFETs part numbering



In the spotlight

LV & MV MOSFETs

Advanced high cell density trench technology

Superior FOM $R_{DS(on)} \cdot Q_g$

Optimized gate charge to minimize driver losses

100% avalanche tested

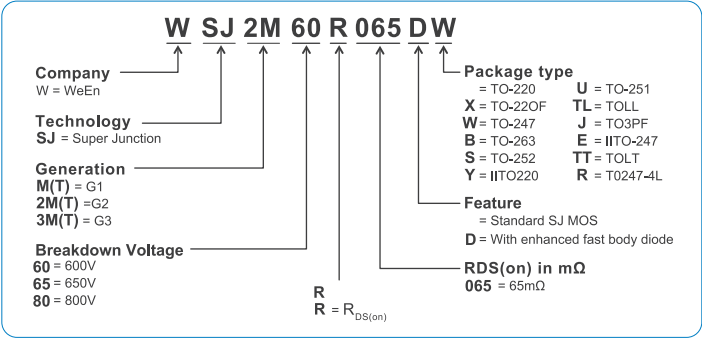


Package	Config.	V _{DS} (V)	V _{GS} (±V)	R _{DS(on)} (max)(mΩ)			I _D @ 25°C (A)	Product name
				@ V _{GS} = 10V	@ V _{GS} = 4.5V	@ V _{GS} = 2.5V		
PDFN5x6 (SuperSO8 equiv.)	N	30	±20	2	3.3	-	150	WMS30N020V
				3.4	6	-	118	WMS30N034V
				4.5	7	-	81	WMS30N045V
				5	8	-	71	WMS30N050V
				8.5	15	-	41	WMS30N085V
		40	±20	0.9	-	-	330	W3MS40N009V
				1.2	-	-	300	W3MS60N010V
				1.6	-	-	215	W3MS60N016V
				4	-	-	107	W3MS60N040V
				2.2	-	-	150	W3MS80N022V
PDFN3.3x3.3	N	30	±20	4.2	-	-	125	W3MS100N042V
				12	-	-	60	W3MS100N120MV
				4.5	7	-	67	WMS30N045E
				5	8	-	62	WMS30N050E
				8.5	15	-	40	WMS30N085E
		20	±12	14	21	-	30	WMS30N140E
				25	35	-	19	WMS30N250E
				-	30	45	17	WMS30N300SE
				-	27	44	18	WMS20N270SE
				2	3.3	-	159	WMS30N020S
TO-252 (DPAK)	N	30	±20	3.4	6	-	105	WMS30N034S
				4.5	7	-	94	WMS30N045S
				5	8	-	87	WMS30N050S
				3.8	-	-	-	W3MS80N038S
				25	35	-	5.9	WMS30N250K
		30	±12	42	65	-	4.5	WMS30N420K
				-	30	45	5.4	WMS30N300SK
				-	50	65	4.2	WMS30N500SK
				-	120	145	2.7	WMS30N1200SK
				-	27	44	6	WMS20N270SK
SOT-23	N	20	±10	-	30	45	5.4	WMS20N300SK
				-	50	65	4.2	WMS20N500SK
				-	70	100	3.5	WMS20N700SK
				3	-	-	190	W3MS60N030B
				2.5	-	-	245	W3MS100N025B
		60	±20	4.3	-	-	150	W3MS100N042B
				7.5	-	-	124	W3MS150N075B
				1	-	-	350	W3MS80N010TL
				1.3	-	-	390	W3MS100N013TL
				1.6	-	-	380	W3MS100N015TL
TO-263 (D ² PAK)	N	100	±20	1.9	-	-	300	W3MS100N019TL
				2.5	-	-	-	W3MS100N025TL
				3.8	-	-	240	W3MS150N038TL
				11	-	-	128	W3MS200N110TL
				1.6	-	-	380	W3MS100N015TT
		150	±20	3.9	-	-	215	W2MS150N039TT
				3	4	-	152	WMS30N030
				3	-	-	190	W3MS60N030
				2.2	-	-	280	W3MS80N023
				2.5	-	-	242	W3MS100N026
TOLL	N	100	±20	4.2	-	-	150	W3MS100N042
				11	-	-	130	W3MS150N110
				11	-	-	120	W3MS200N110
				11	-	-	85	W3MS150N110X
				2.5	-	-	245	W3MS100N025W
		150	±20	3.8	-	-	220	W3MS150N038W
				22	-	-	-	W3MS250N220W
TOLT	N	30	±20	3	-	-	-	
				3	-	-	-	
				2.2	-	-	-	
				2.5	-	-	-	
				4.2	-	-	-	
		60	±20	11	-	-	-	
				11	-	-	-	
				11	-	-	-	
				11	-	-	-	
				11	-	-	-	
TO-220	N	100	±20	11	-	-	-	
				11	-	-	-	
				11	-	-	-	
				11	-	-	-	
				11	-	-	-	
		150	±20	11	-	-	-	
				11	-	-	-	
				11	-	-	-	
				11	-	-	-	
				11	-	-	-	
TO-220F	N	100	±20	11	-	-	-	
				11	-	-	-	
				11	-	-	-	
				11	-	-	-	
				11	-	-	-	
		150	±20	11	-	-	-	
				11	-	-	-	
				11	-	-	-	
				11	-	-	-	
				11	-	-	-	
TO-247	N	100	±20	11	-	-	-	
				11	-	-	-	
				11	-	-	-	
				11	-	-	-	
				11	-	-	-	
		150	±20	11	-	-	-	
				11	-	-	-	
				11	-	-	-	
				11	-	-	-	
				11	-	-	-	

MOSFETs (HV)

Types in **bold blue** represent new products
Types in **bold red italic** represent products in development

HV MOSFETs part numbering



W

SJ

2M

60

R

065

DW

In the spotlight

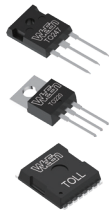
Super Junction MOSFETs

Superior FOM $R_{DS(on)} \cdot Q_g$

Extremely low switching loss

Integrated Ultrafast Body Diode available

100% avalanche tested



Package		V _{DS} (V)	V _{GS} (±V)	R _{DS(ON)} (max)(mΩ)	I _D @ 25 °C (A)	Feature	Technology	Product name				
				@ V _{GS} = 10V								
TO-247		600	±30	23	100	with FRD	super junction	WSJ2T60R023DW				
				28	90	with FRD	super junction	WSJT60R028DW				
				65	55	with FRD	super junction	WSJ2M60R065DW				
		650	±30	23	100	with FRD	super junction	WSJ2T65R023DW				
				28	90	with FRD	super junction	WSJT65R028DW				
				41	75	with FRD	super junction	WSJ3M65R041DW				
				44	67	with FRD	super junction	WSJM65R044DW				
				44	60	-	super junction	WSJM65R044W				
				65	50	with FRD	super junction	WSJ3M65R065DW				
				75	50	with FRD	super junction	WSJT65R075DW				
				99	32	with FRD	super junction	WSJM65R099DW				
				99	31	with FRD	super junction	WSJ2T65R099DW				
				120	30	-	super junction	WSJM65R120W				
				170	23	-	super junction	WSJM65R170W				
TO-220		600	±30	65	50	with FRD	super junction	WSJ2M60R065D				
				65	50	with FRD	super junction	WSJ3M65R065D				
				99	32	with FRD	super junction	WSJM65R099D				
		600	±30	99	31	with FRD	super junction	WSJ2T65R099D				
				120	30	-	super junction	WSJM65R120				
				170	23	-	super junction	WSJM65R170				
				260	13	-	super junction	WSJM65R260				
				360	9.7	-	super junction	WSJM65R360				
				380	9	with FRD	super junction	WSJ2T65R380				
				600	6.5	-	super junction	WSJM65R600				
		800	±30	200	23	-	super junction	WSJM80R200				
		TO-220F		600	±30	65	50	with FRD	super junction	WSJ2M60R065DX		
						65	50	with FRD	super junction	WSJ3M65R065DX		
						99	32	with FRD	super junction	WSJM65R099DX		
650	±30			99	31	with FRD	super junction	WSJ2T65R099DX				
				120	30	-	super junction	WSJM65R120X				
				170	23	-	super junction	WSJM65R170X				
				260	13	-	super junction	WSJM65R260X				
				360	9.7	-	super junction	WSJM65R360X				
				380	9	with FRD	super junction	WSJ2T65R380X				
				600	6.5	-	super junction	WSJM65R600X				
800	±30			600	6	with FRD	super junction	WSJ2T65R600X				
				IITO-220				200	23	-	super junction	WSJM80R200X
								170	23	-	super junction	WSJM65R170Y
650	±30				260	13	-	super junction	WSJM65R260Y			
		360	9.7		-	super junction	WSJ2T65R360Y					
TO-263 (D2PAK)		600	±30	600	6.5	-	super junction	WSJM65R600Y				
				65	50	with FRD	super junction	WSJ2M60R065DB				
				99	32	with FRD	super junction	WSJM65R099DB				
		650	±30	99	31	with FRD	super junction	WSJ2T65R099DB				
				120	30	-	super junction	WSJM65R120B				
				170	23	-	super junction	WSJM65R170B				
				260	13	-	super junction	WSJM65R260B				
				360	9.7	-	super junction	WSJM65R360B				
				380	9	with FRD	super junction	WSJ2T65R380B				
		800	±30	200	23	-	super junction	WSJM80R200B				
TO-252(DPAK)				360	9.7	-	super junction	WSJM65R360S				
				380	9	with FRD	super junction	WSJ2T65R380S				
	650	±30	600	6.5	-	super junction	WSJM65R600S					
			600	6	with FRD	super junction	WSJ2T65R600S					
TO-251(IPAK)		650	±30	600	6.5	-	super junction	WSJM65R600U				
TOLL		600	±30	65	50	with FRD	super junction	WSJ2M60R065DTL				
				41	55	with FRD	super junction	WSJ3M65R045DTL				
				99	25	with FRD	super junction	WSJM65R099DTL				
		650	±30	99	24	with FRD	super junction	WSJ2T65R099DTL				
				120	23	-	super junction	WSJM65R120TL				
TO247-4L		650	±30	170	21	-	super junction	WSJM65R170TL				
IITO247		650	±30	28	80	with FRD	super junction	WSJT65R028DR				
				75	30	with FRD	super junction	WSJT65R075DE				