

## Silicon Power Schottky Diode

$V_{RRM} = 20\text{ V} - 100\text{ V}$

$I_F = 500\text{ A}$

### Features

- High Surge Capability
- Types up to 100 V  $V_{RRM}$
- Isolation Type Package

Heavy Three Tower Package

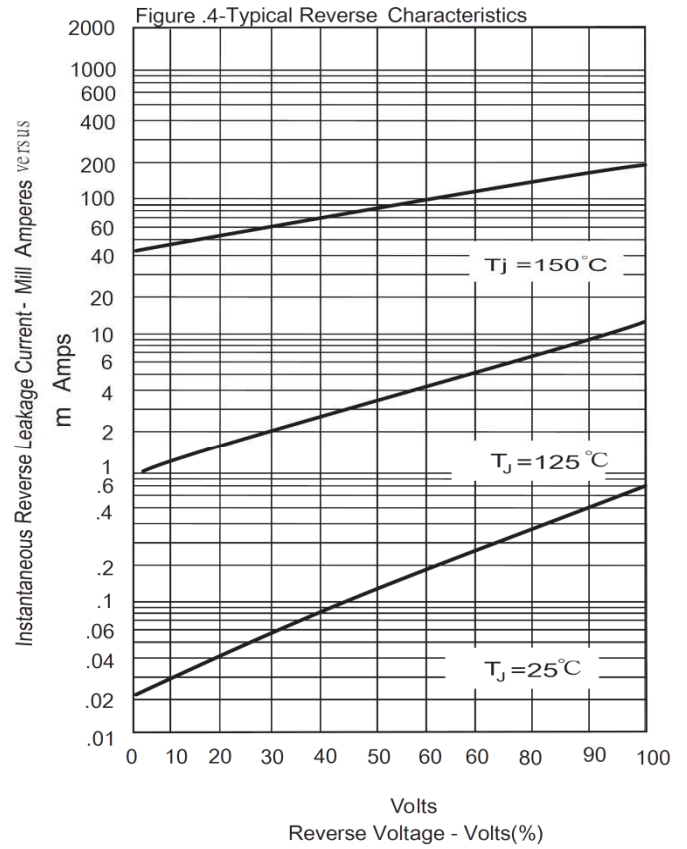
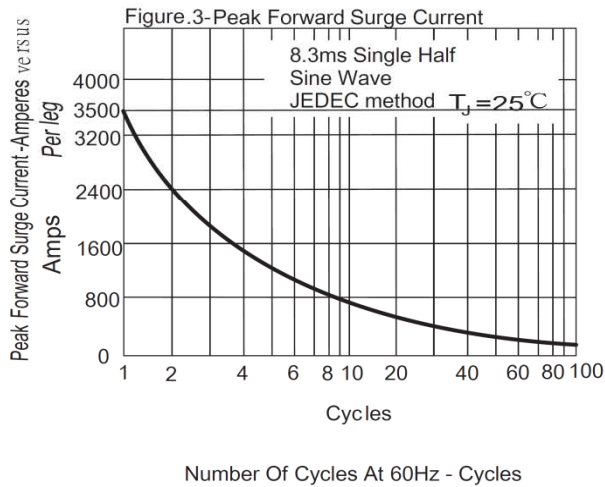
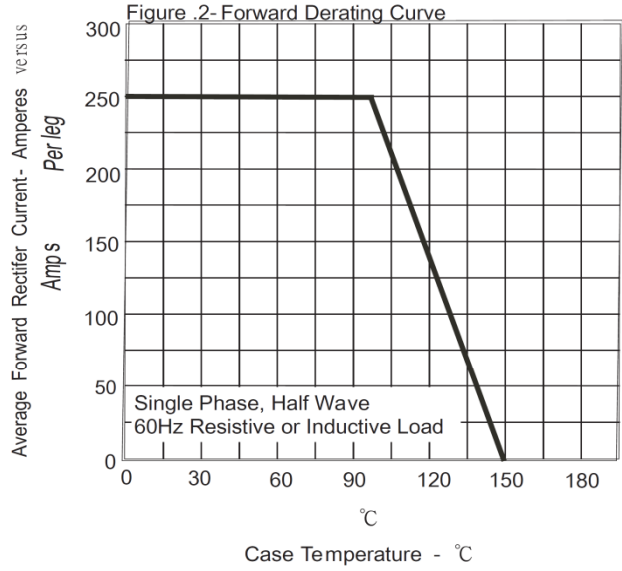
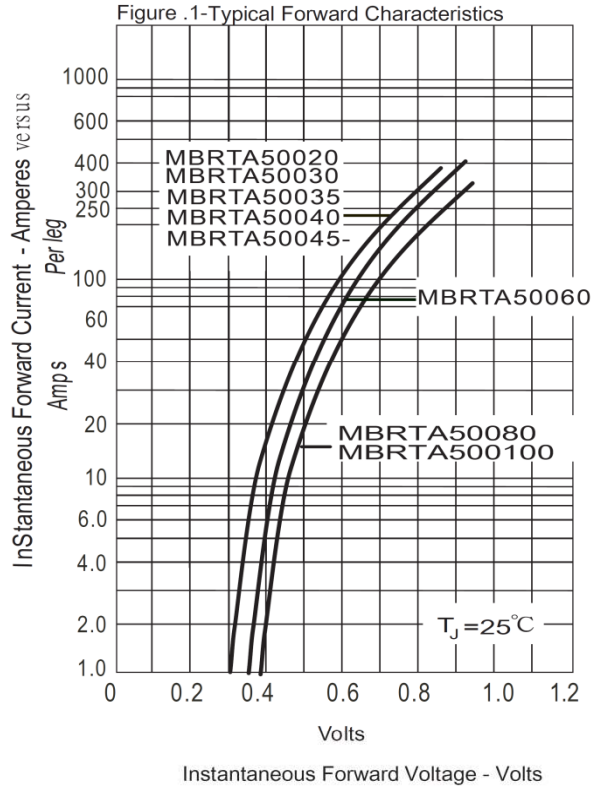


Maximum ratings, at  $T_j = 25\text{ °C}$ , unless otherwise specified ("R" devices have leads reversed)

Parameter	Symbol	Conditions	MBRTA50020 (R)	MBRTA50030 (R)	MBRTA50035 (R)	MBRTA50040 (R)	Unit
Repetitive peak reverse voltage	$V_{RRM}$		20	30	35	40	V
RMS reverse voltage	$V_{RMS}$		14	21	25	28	V
DC blocking voltage	$V_{DC}$		20	30	35	40	V
Continuous forward current	$I_F$	$T_C \leq 100\text{ °C}$	500	500	500	500	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ °C}$ , $t_p = 8.3\text{ ms}$	3500	3500	3500	3500	A
Operating temperature	$T_j$		-40 to 150	-40 to 150	-40 to 150	-40 to 150	°C
Storage temperature	$T_{stg}$		-40 to 175	-40 to 175	-40 to 175	-40 to 175	°C

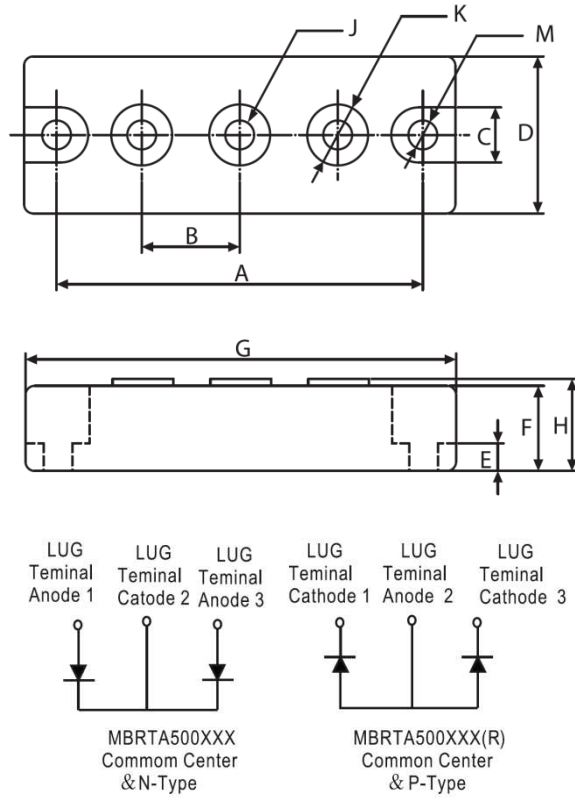
Electrical characteristics, at  $T_j = 25\text{ °C}$ , unless otherwise specified

Parameter	Symbol	Conditions	MBRTA50020 (R)	MBRTA50030(R)	MBRTA50035 (R)	MBRTA50040 (R)	Unit
Diode forward voltage	$V_F$	$I_F = 250\text{ A}$ , $T_j = 25\text{ °C}$	0.75	0.75	0.75	0.75	V
Reverse current	$I_R$	$V_R = 20\text{ V}$ , $T_j = 25\text{ °C}$	1	1	1	1	mA
		$V_R = 20\text{ V}$ , $T_j = 125\text{ °C}$	20	20	20	20	
<b>Thermal characteristics</b>							
Thermal resistance, junction - case	$R_{thJC}$		0.12	0.12	0.12	0.12	°C/W



## Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	3.150	NOM	80.01	NOM	
B	.872	.892	22.15	22.65	
C	.465	.479	11.82	12.18	
D	1.337	1.356	33.95	34.45	
E	.230	.234	5.84	6.16	
F	.725	REF	18.42	REF	
G	3.668	3.768	93.17	95.71	
H	—	.791	—	20.10	
J	1/4-20 UNC FULL				
K	.509	.538	12.92	13.68	Ø
M	.238	.258	6.05	6.55	Ø