

Silicon Power Schottky Diode

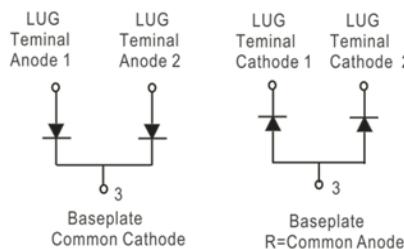
V_{RRM} = 20 V - 40 V

I_{F(AV)} = 500 A

Features

- High Surge Capability
- Types from 20 V to 40 V V_{RRM}
- Not ESD Sensitive

Twin Tower Package



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

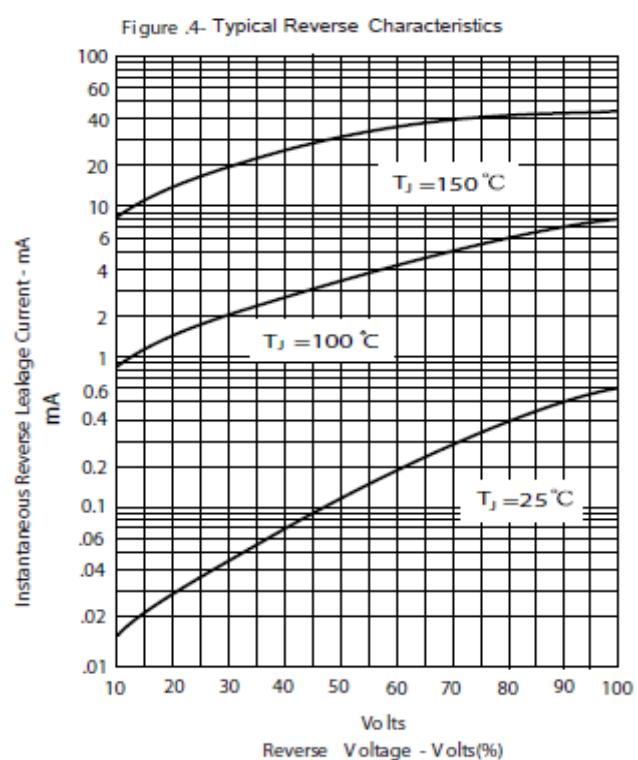
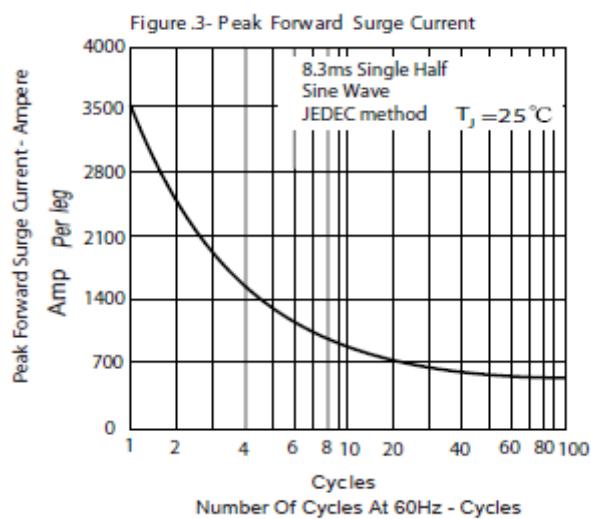
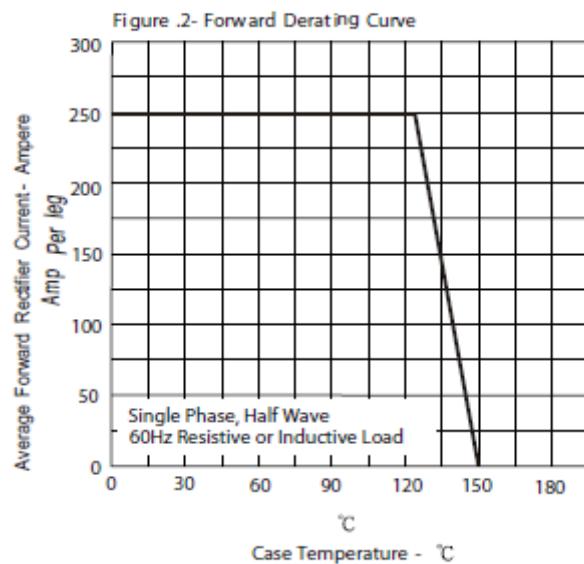
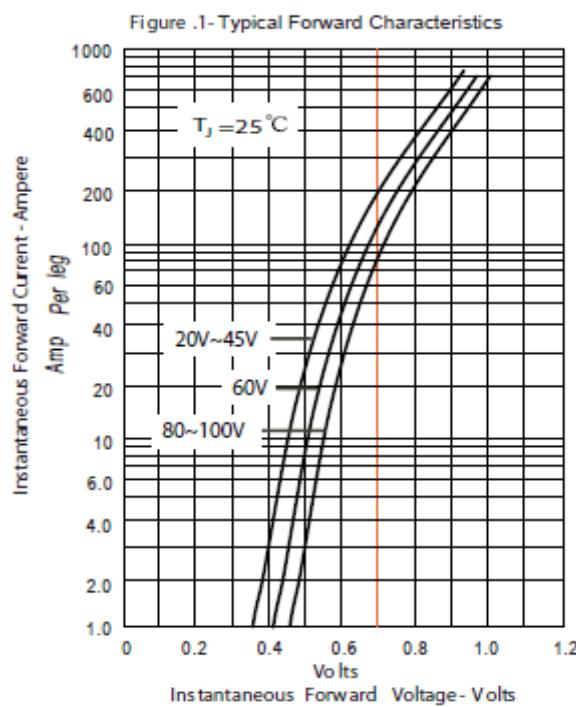
Parameter	Symbol	Conditions	MBR50020CT(R)	MBR50030CT(R)	MBR50035CT(R)	MBR50040CT(R)	Unit
Repetitive peak reverse voltage	V _{RRM}		20	30	35	40	V
RMS reverse voltage	V _{RMS}		14	21	25	28	V
DC blocking voltage	V _{DC}		20	30	35	40	V
Operating temperature	T _j		-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C
Storage temperature	T _{stg}		-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C

Electrical characteristics, at T_j = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	MBR50020CT(R)	MBR50030CT(R)	MBR50035CT(R)	MBR50040CT(R)	Unit
Average forward current (per pkg)	I _{F(AV)}	T _C = 125 °C	500	500	500	500	A
Peak forward surge current (per leg)	I _{FSM}	t _p = 8.3 ms, half sine	3500	3500	3500	3500	A
Maximum forward voltage (per leg)	V _F	I _{FM} = 250 A, T _j = 25 °C	0.75	0.75	0.75	0.75	V
Reverse current at rated DC blocking voltage (per leg)	I _R	T _j = 25 °C T _j = 100 °C T _j = 150 °C	1 10 50	1 10 50	1 10 50	1 10 50	mA

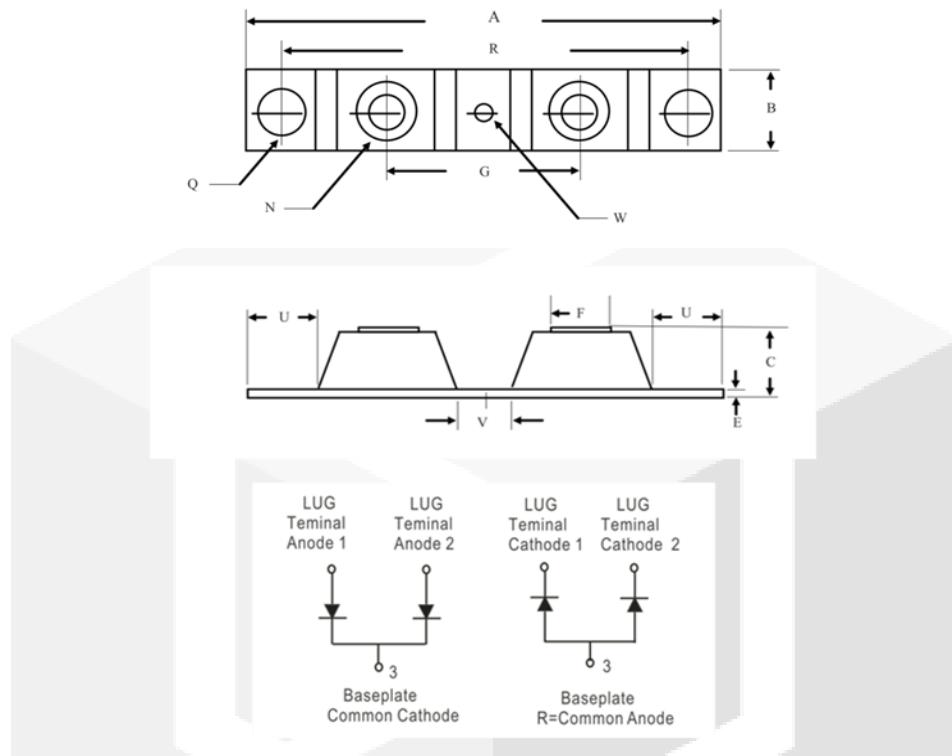
Thermal characteristics

Thermal resistance, junction-case, per leg	R _{θJC}	0.30	0.30	0.30	0.30	°C/W
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Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



DIM	Inches		Millimeters	
	Min	Max	Min	Max
A	----	3.630	----	92.40
B	0.700	0.800	17.78	20.32
C	----	0.650	----	16.51
E	0.130	0.141	3.30	3.60
F	0.482	0.490	12.25	12.45
G	1.368	BSC	34.75	BSC
N	1/4-20 UNC FULL			
Q	0.275	0.290	6.99	7.37
R	3.150	BSC	80.01	BSC
U	0.600	----	15.24	----
V	0.312	0.370	7.92	9.40
W	0.180	0.195	4.57	4.95