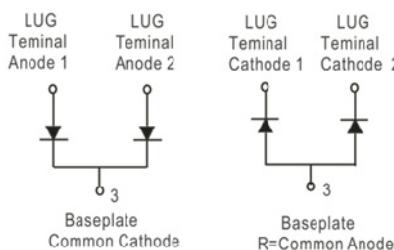


# Low V<sub>F</sub> Silicon Power Schottky Diode

**V<sub>RRM</sub> = 20 V**
**I<sub>F(AV)</sub> = 300 A**

## Features

- High Surge Capability
- Type 20 V V<sub>RRM</sub>
- Not ESD Sensitive

**Twin Tower Package**


**Maximum ratings, at T<sub>j</sub> = 25 °C, unless otherwise specified ("R" devices have leads reversed)**

Parameter	Symbol	Conditions	MBR30020CT(R)L	Unit
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>		20	V
Maximum RMS voltage	V <sub>RMS</sub>		14	V
Maximum DC blocking voltage	V <sub>DC</sub>		20	V
Operating temperature	T <sub>j</sub>		-55 to 150	°C
Storage temperature	T <sub>stg</sub>		-55 to 150	°C

**Electrical characteristics, at T<sub>j</sub> = 25 °C, unless otherwise specified**

Parameter	Symbol	Conditions	MBR30020CT(R)L	Unit
Average forward current (per pkg)	I <sub>F(AV)</sub>	T <sub>C</sub> = 100 °C	300	A
Peak forward surge current (per leg)	I <sub>FSM</sub>	t <sub>p</sub> = 8.3 ms, half sine	2000	A
Maximum instantaneous forward voltage (per leg)	V <sub>F</sub>	I <sub>FM</sub> = 150 A, T <sub>j</sub> = 25 °C	0.58	V
Maximum instantaneous reverse current at rated DC blocking voltage (per leg)	I <sub>R</sub>	T <sub>j</sub> = 25 °C T <sub>j</sub> = 100 °C	3 100	mA

## Thermal characteristics

Maximum thermal resistance, junction - case (per leg)	R <sub>θJC</sub>	0.40	°C/W
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Figure .1-Typical Forward Characteristics

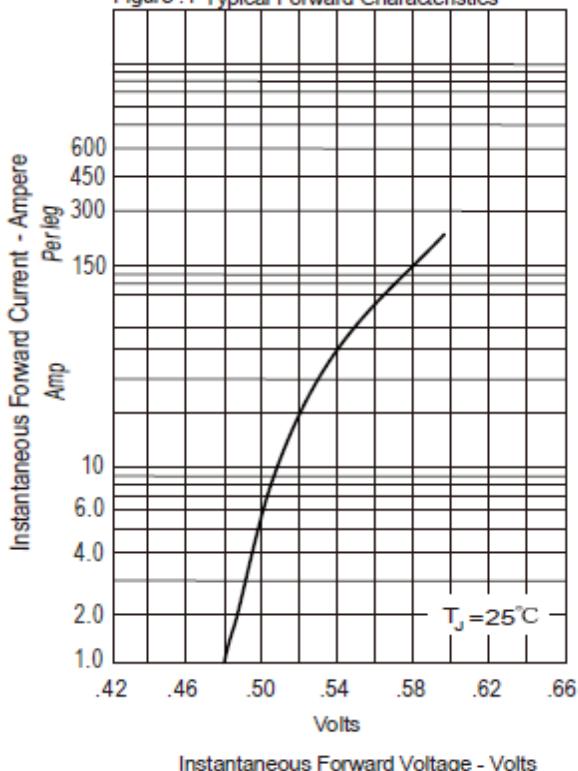


Figure .2-Forward Derating Curve

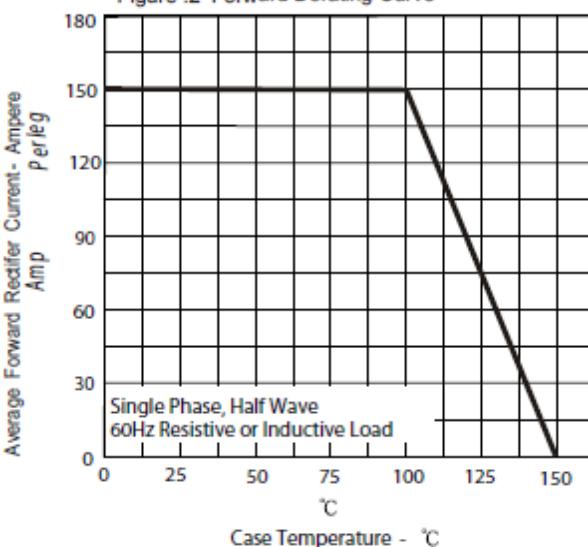


Figure .4- Typical Reverse Characteristics

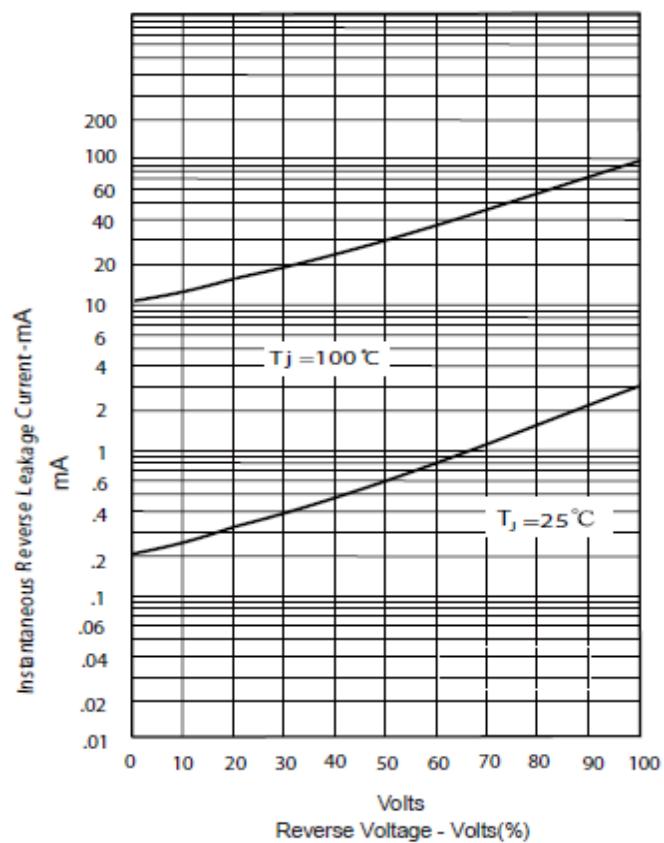
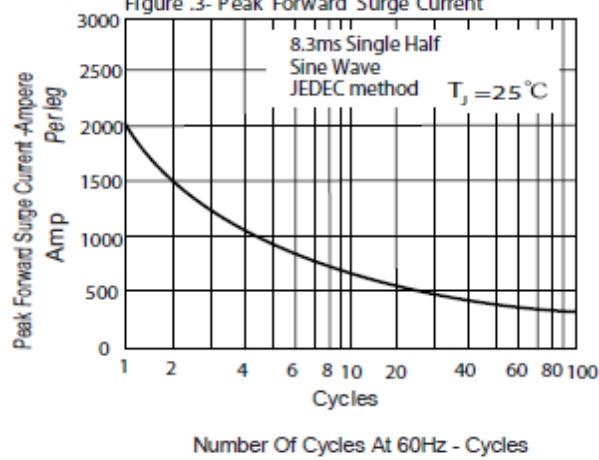
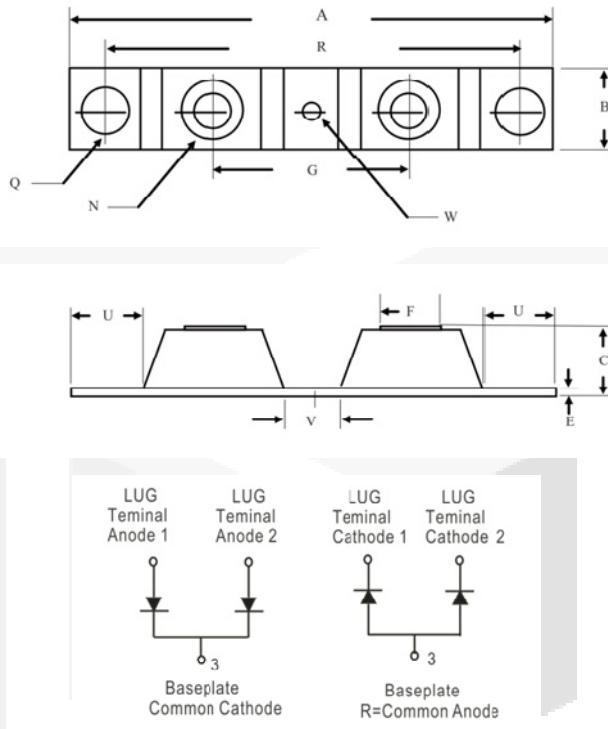


Figure .3- Peak Forward Surge Current



## 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