

Low V_F Silicon Power Schottky Diode

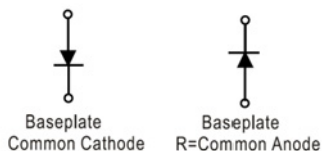
$$V_{RRM} = 30 \text{ V}$$

$$I_{F(AV)} = 300 \text{ A}$$

Features

- High Surge Capability
- Type 30 V V_{RRM}
- Not ESD Sensitive

D-67 Package



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

Parameter	Symbol	Conditions	MBRH30030(R)L	Unit
Maximum recurrent peak reverse voltage	V_{RRM}		30	V
Maximum RMS voltage	V_{RMS}		21	V
Maximum DC blocking voltage	V_{DC}		30	V
Operating temperature	T_j		-55 to 150	$^\circ\text{C}$
Storage temperature	T_{stg}		-55 to 150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	MBRH30030(R)L	Unit
Average forward current	$I_{F(AV)}$	$T_C = 100^\circ\text{C}$	300	A
Peak forward surge current	I_{FSM}	$t_p = 8.3 \text{ ms}$, half sine	4000	A
Maximum instantaneous forward voltage	V_F	$I_{FM} = 300 \text{ A}$, $T_j = 25^\circ\text{C}$	0.58	V
Maximum instantaneous reverse current at rated DC blocking voltage	I_R	$T_j = 25^\circ\text{C}$	3	mA
		$T_j = 100^\circ\text{C}$	250	

Thermal characteristics

Maximum thermal resistance, junction - case	$R_{\theta JC}$	0.28	$^\circ\text{C/W}$
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Figure .1-Typical Forward Characteristics

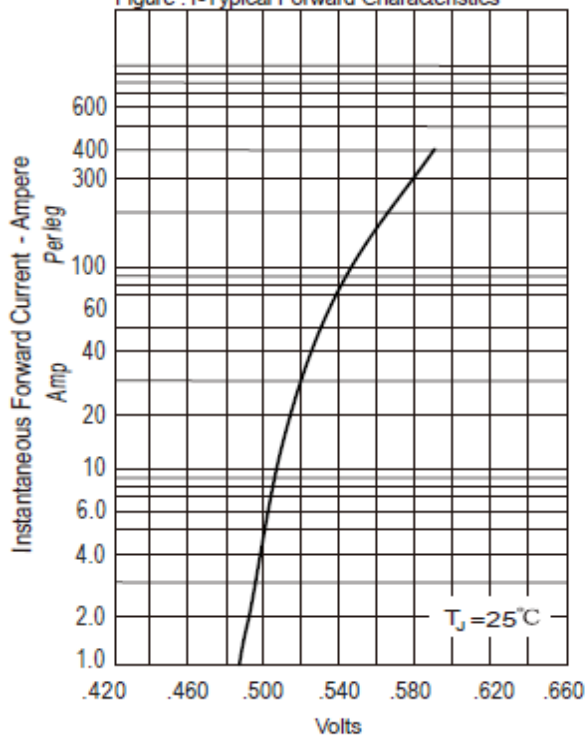


Figure .2- Forward Derating Curve

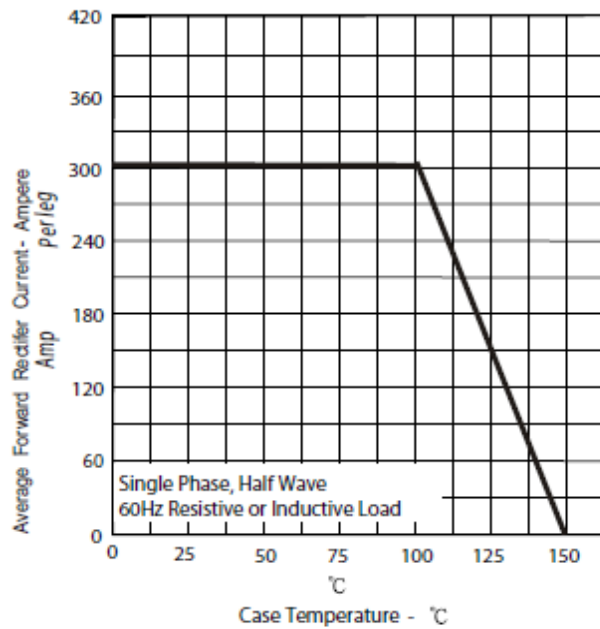


Figure.3-Peak Forward Surge Current

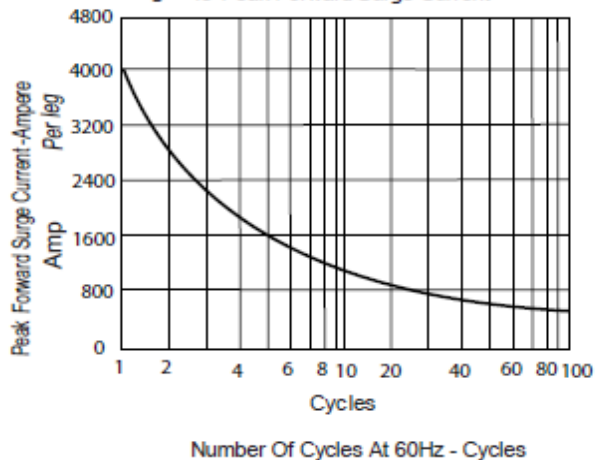
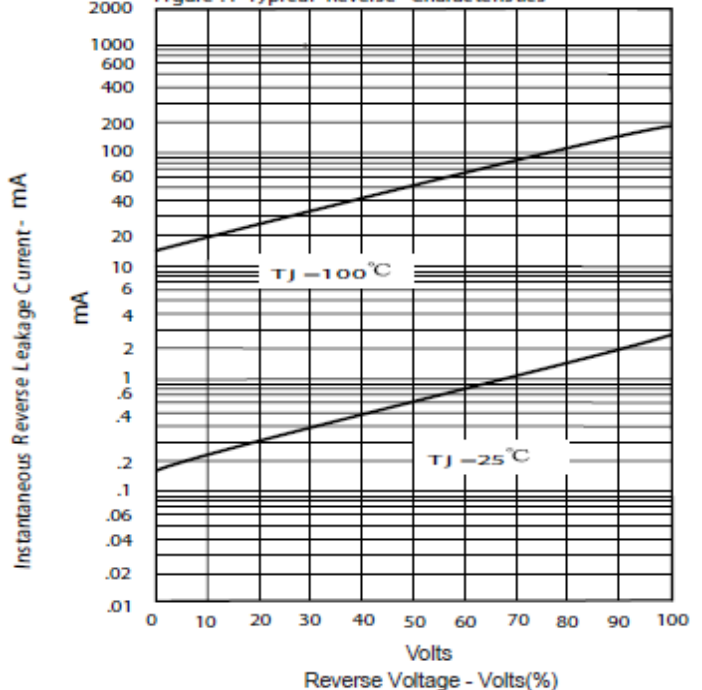
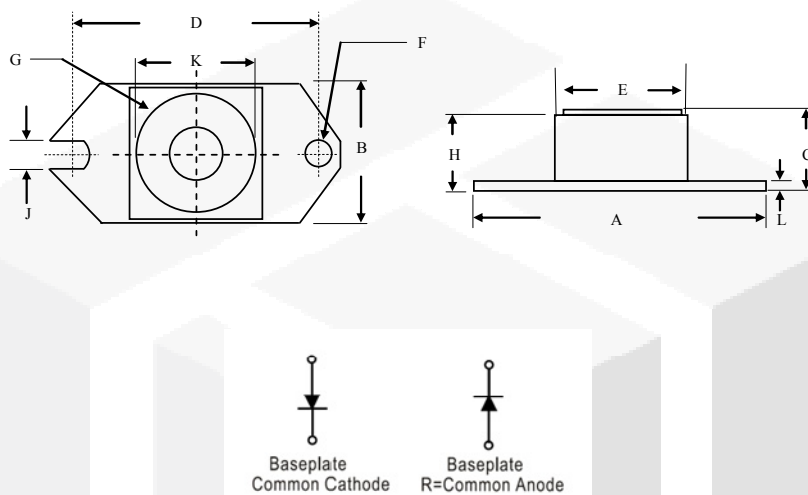


Figure .4- Typical Reverse Characteristics



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



	Inches		Millimeters	
	Min	Max	Min	Max
A	1.515	1.560	38.48	39.62
B	0.725	0.775	18.42	19.69
C	0.595	0.625	15.11	15.88
D	1.182	1.192	30.02	30.28
E	0.736	0.744	18.70	18.90
F	0.152	0.160	3.86	4.061
G	1/4-20 UNC			
H	0.540	0.580	13.72	14.73
J	0.156	0.160	3.96	4.06
K	0.480	0.492	12.20	12.50
L	0.120	0.130	3.05	3.30