Low V_F Silicon Power Schottky Diode

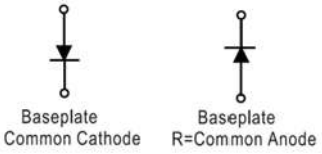
V_{RRM} = 20 V

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

Features

- High Surge Capability
- Type 20 V V_{RRM}
- Not ESD Sensitive

D-67 Package



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

Parameter	Symbol	Conditions	MBRH30020(R)L	Unit
Maximum recurrent peak reverse voltage	V_{RRM}		20	V
Maximum RMS voltage	V_{RMS}		14	V
Maximum DC blocking voltage	V_{DC}		20	V
Operating temperature	T_j		-55 to 150	°C
Storage temperature	T_{stg}		-55 to 150	°C

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

Parameter	Symbol	Conditions	MBRH30020(R)L	Unit
Average forward current	$I_{F(AV)}$	T_C = 100 °C	300	A
Peak forward surge current	I_{FSM}	t_p = 8.3 ms, half sine	4000	A
Maximum instantaneous forward voltage	V_F	I_{FM} = 300 A, Tj = 25 °C	0.58	V
Maximum instantaneous reverse current at rated DC blocking voltage	I_R	T_j = 25 °C	3	mA
		T_j = 100 °C	200	
Thermal characteristics				
Maximum thermal resistance, junction - case	$R_{\theta JC}$		0.28	°C/W

Figure .1-Typical Forward Characteristics

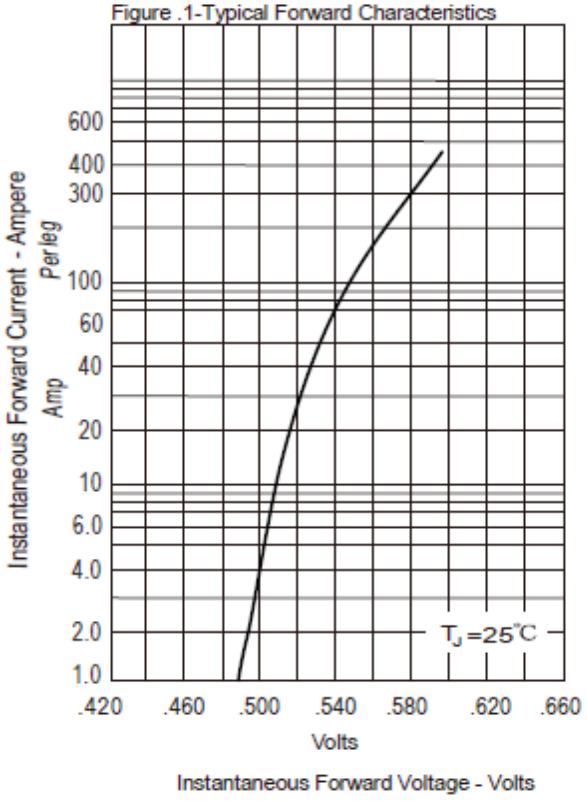


Figure .2- Forward Derating Curve

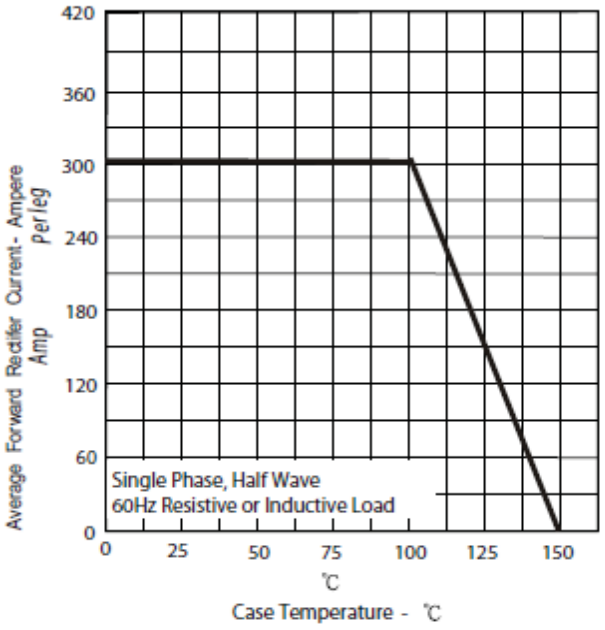


Figure .3-Peak Forward Surge Current

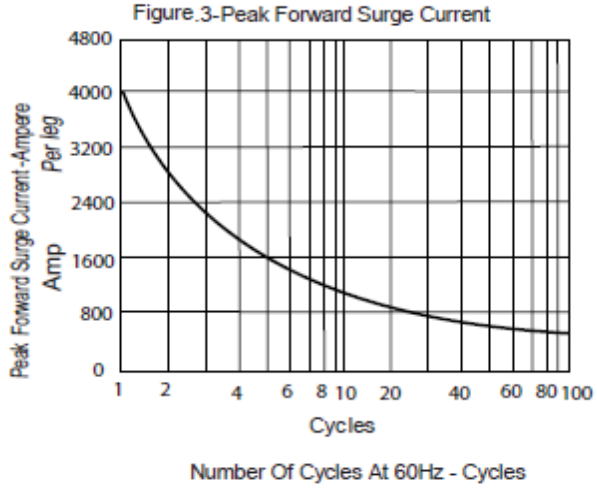
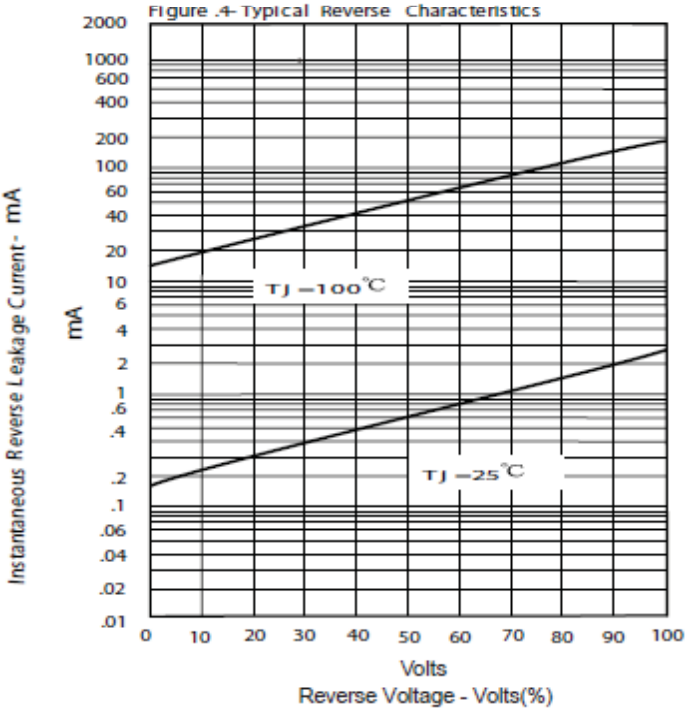
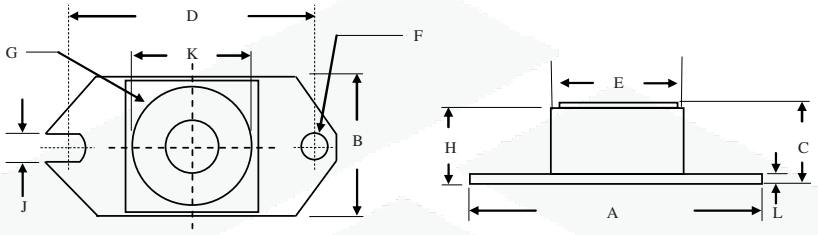


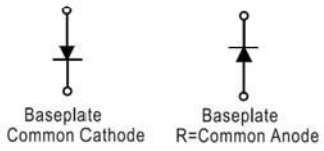
Figure .4- Typical Reverse Characteristics



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