Silicon Power Schottky Diode

V_{RRM} = 20 V - 100 V

I_F = 200 A

Features

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

Three Tower Package

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

Parameter	Symbol	Conditions	MBRT20045 (R)	MBRT20060 (R)	MBRT20080 (R)	MBRT200100 (R)	Unit
Repetitive peak reverse voltage	V_{RRM}		45	60	80	100	V
RMS reverse voltage	V_{RMS}		32	42	57	70	V
DC blocking voltage	V_{DC}		45	60	80	100	V
Continuous forward current	I_F	$T_C \leq 125$ °C	200	200	200	200	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	T_C = 25 °C, t_p = 8.3 ms	1500	1500	1500	1500	A
Operating temperature	T_j		-55 to 175	-55 to 175	-55 to 175	-55 to 175	°C
Storage temperature	T_{stg}		-55 to 175	-55 to 175	-55 to 175	-55 to 175	°C

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

Parameter	Symbol	Conditions	MBRT20045 (R)	MBRT20060(R)	MBRT20080 (R)	MBRT200100 (R)	Unit
Diode forward voltage	V_F	I_F = 100 A, T_j = 25 °C	0.75	0.8	0.88	0.88	V
Reverse current	I_R	V_R = 20 V, T_j = 25 °C	1	1	1	1	mA
		V_R = 20 V, T_j = 125 °C	20	20	20	20	
Thermal characteristics							
Thermal resistance, junction - case	R_{thJC}		0.18	0.18	0.18	0.18	°C/W

Figure .1- Typical Forward Characteristics

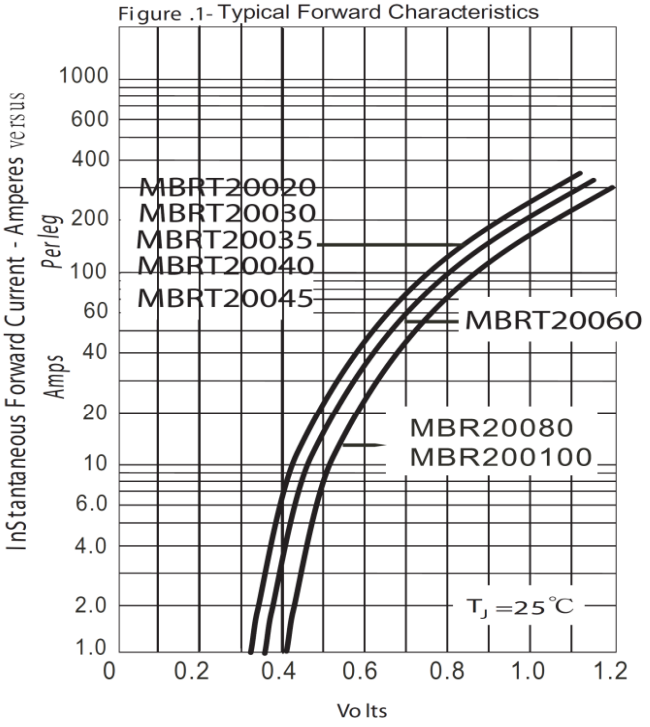


Figure .2- Forward Derating Curve

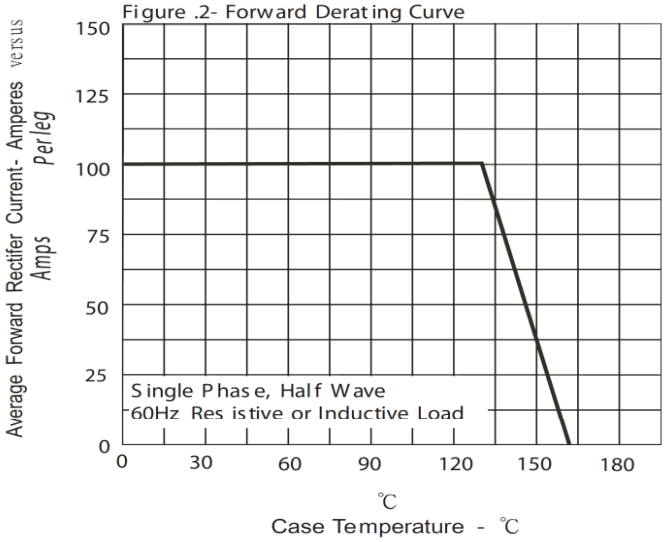


Figure.3-Peak Forward Surge Current

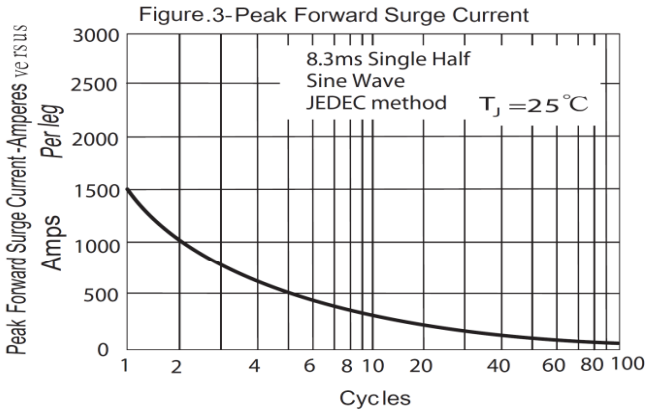
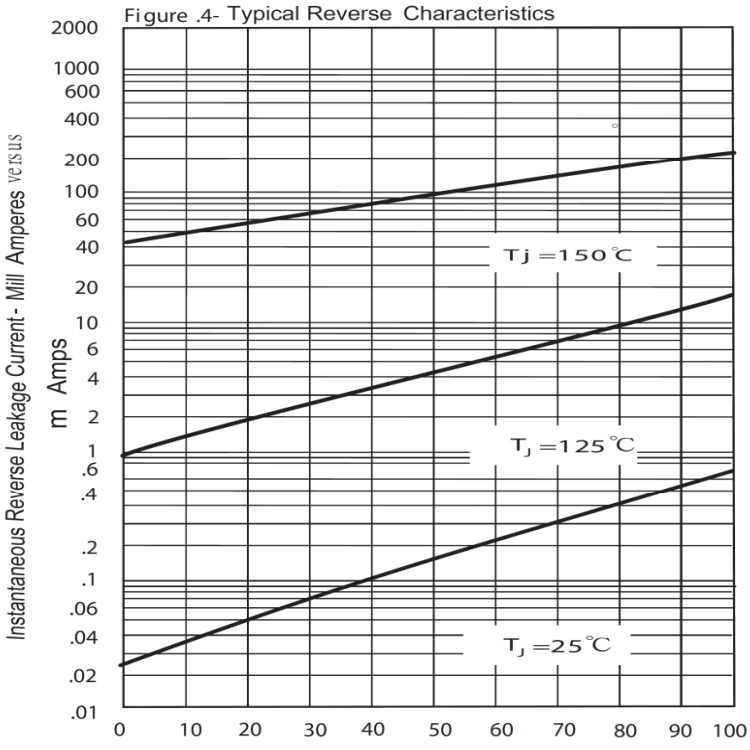
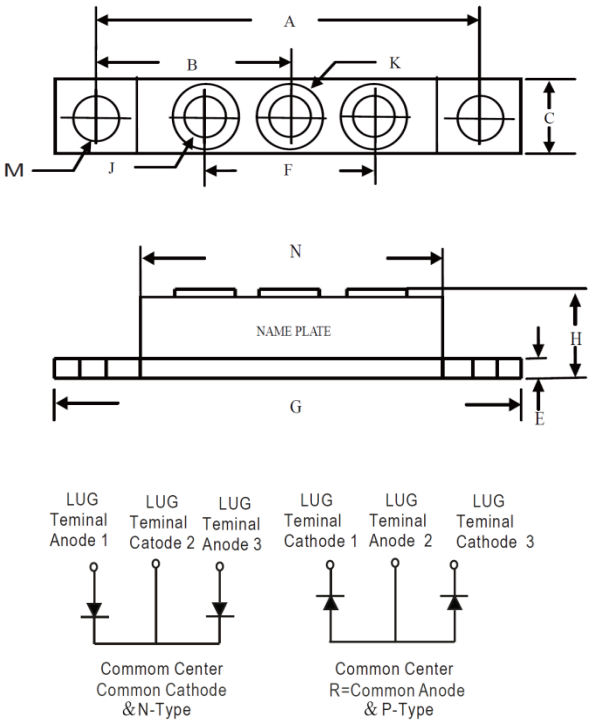


Figure .4- Typical Reverse Characteristics



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



DIM	Inches		Millimeters	
	Min	Max	Min	Max
A	3.150	NOM	80.01	NOM
B	1.565	1.585	39.75	40.26
C	.700	.800	17.78	20.32
E	.119	.132	3.02	3.35
F	1.327	REF	33.72	REF
G	3.55	3.65	90.17	92.71
H	-----	.73	-----	18.30
J	1/4-20 UNC FULL			
K	.472	.511	12	13
M	.275	.295	6.99	7.49
N	2.38	2.46	60.5	62.5