Silicon Power Schottky Diode

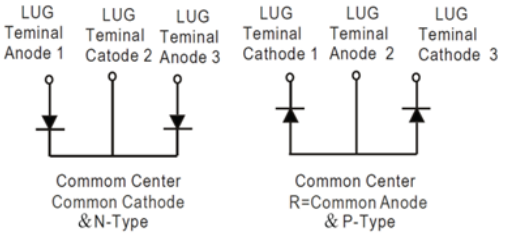
V_{RRM} = 45 V - 100 V

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

Features

- High Surge Capability
- Types from 45 V to 100 V V_{RRM}
- Isolation Type Package
- Electrically Isolated Base Plate
- Not ESD Sensitive

Three Tower Package





RoHS COMPLIANT

REACH COMPLIANCE

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

Parameter	Symbol	Conditions	MBRT30045(R)	MBRT30060(R)	MBRT30080(R)	MBRT300100(R)	Unit
Repetitive peak reverse voltage	V_{RRM}		45	60	80	100	V
RMS reverse voltage	V_{RMS}		32	42	56	70	V
DC blocking voltage	V_{DC}		45	60	80	100	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 Tj = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	MBRT30045(R)	MBRT30060(R)	MBRT30080(R)	MBRT300100(R)	Unit
Average forward current (per pkg)	$I_{F(AV)}$	T_C = 125 °C	300	300	300	300	A
Peak forward surge current (per leg)	I_{FSM}	t_p = 8.3 ms, half sine	2000	2000	2000	2000	A
Maximum instantaneous forward voltage (per leg)	V_F	I_{FM} = 150 A, T_j = 25 °C	0.70	0.75	0.84	0.84	V
Maximum instantaneous reverse current at rated DC blocking voltage (per leg)	I_R	T_j = 25 °C	1	1	1	1	mA
		T_j = 100 °C	10	10	10	10	
		T_j = 150 °C	30	30	30	30	
Thermal characteristics							
Thermal resistance, junction-case (per leg)	$R_{\Theta JC}$		0.40	0.40	0.40	0.40	°C/W

Figure.1-Typical Forward Characteristics

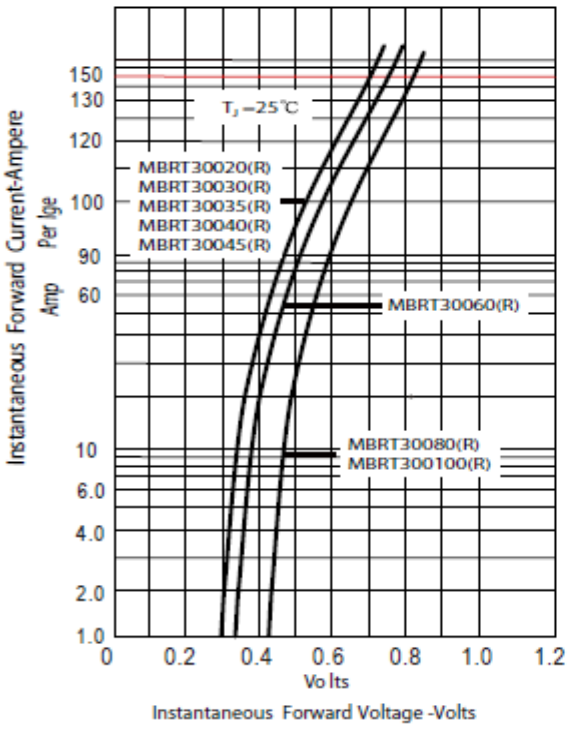
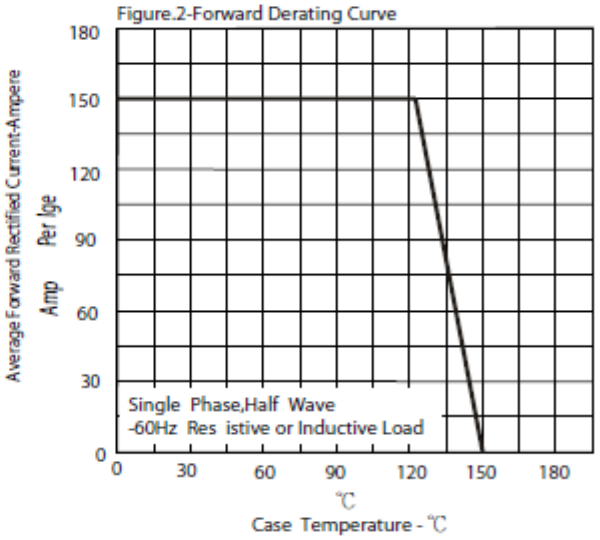


Figure.2-Forward Derating Curve



Figupre.3-Peak Forward Surge Current

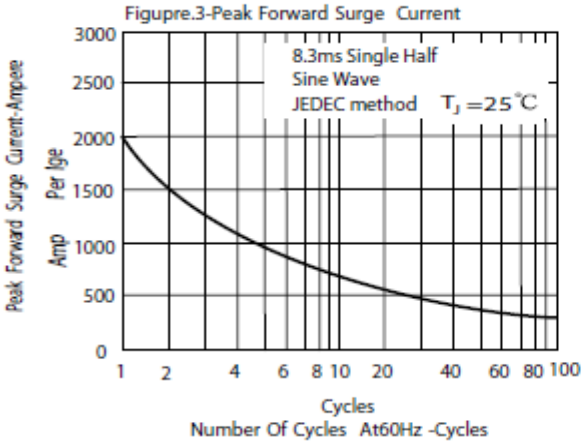
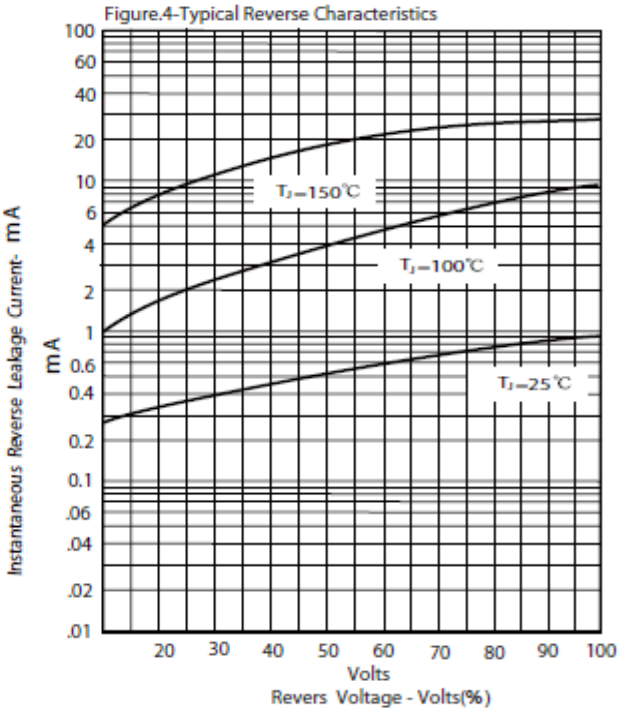
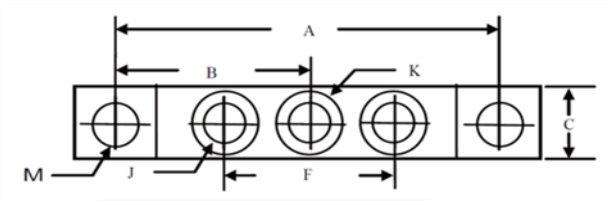


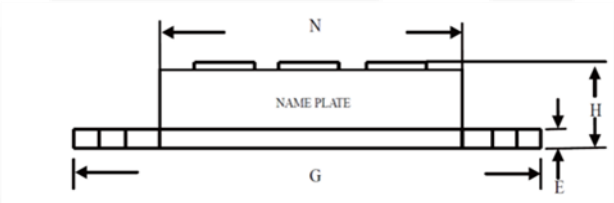
Figure.4-Typical Reverse Characteristics

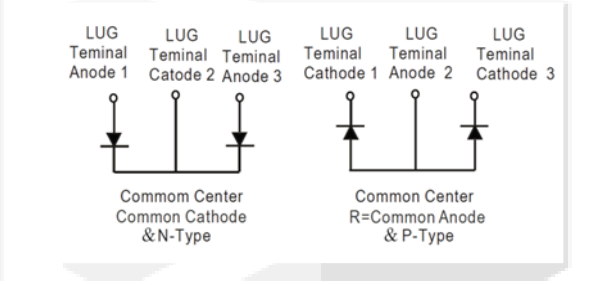


Package dimensions and terminal configuration

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	0.700	0.800	17.78	20.32
E	0.119	0.132	3.02	3.35
F	1.327	-----	33.72	-----
G	3.550	3.650	90.17	92.71
H	0.677	0.720	17.20	18.30
J	1/4 -20 UNC FULL			
K	0.472	0.511	12	13
M	0.275	0.295	6.99	7.49
N	2.380	2.460	60.5	62.5