



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Low V_F Silicon Power Schottky Diode

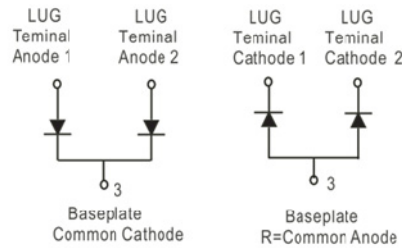
$V_{RRM} = 45 \text{ V}$

$I_{F(AV)} = 400 \text{ A}$

Features

- High Surge Capability
- Type 45 V V_{RRM}
- Not ESD Sensitive

Twin Tower Package



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

Parameter	Symbol	Conditions	MBR40045CT(R)L	Unit
Maximum recurrent peak reverse voltage	V_{RRM}		45	V
Maximum RMS voltage	V_{RMS}		32	V
Maximum DC blocking voltage	V_{DC}		45	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	MBR40045CT(R)L	Unit
Average forward current (per pkg)	$I_{F(AV)}$	$T_C = 100^\circ\text{C}$	400	A
Peak forward surge current (per leg)	I_{FSM}	$t_p = 8.3 \text{ ms}$, half sine	3000	A
Maximum instantaneous forward voltage (per leg)	V_F	$I_{FM} = 200 \text{ A}$, $T_j = 25^\circ\text{C}$	0.60	V
Maximum instantaneous reverse current at rated DC blocking voltage (per leg)	I_R	$T_j = 25^\circ\text{C}$	5	mA
		$T_j = 100^\circ\text{C}$	350	

Thermal characteristics

Maximum thermal resistance, junction - case (per leg)	$R_{\theta JC}$		0.35	$^\circ\text{C/W}$
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Figure .1-Typical Forward Characteristics

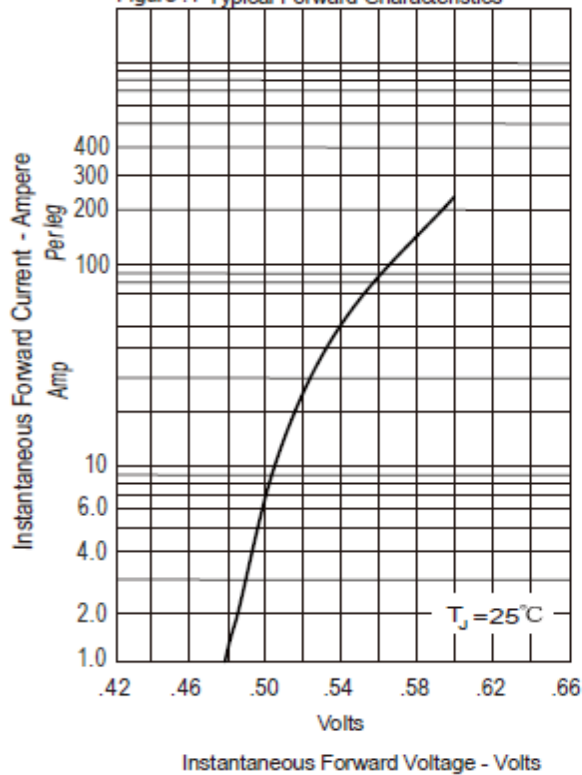


Figure .2- Forward Derating Curve

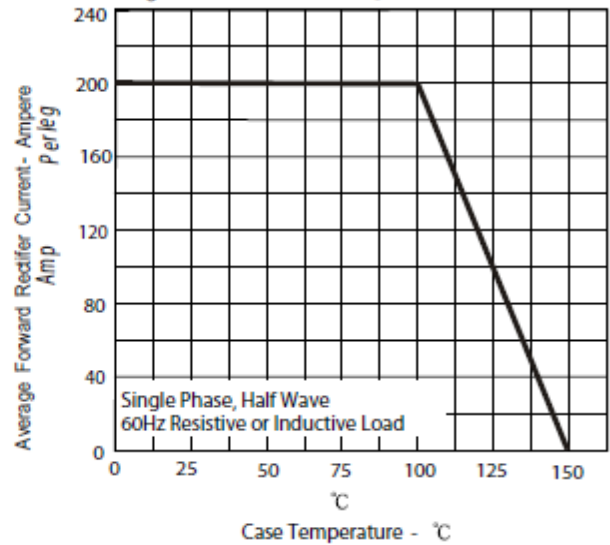


Figure .4- Typical Reverse Characteristics

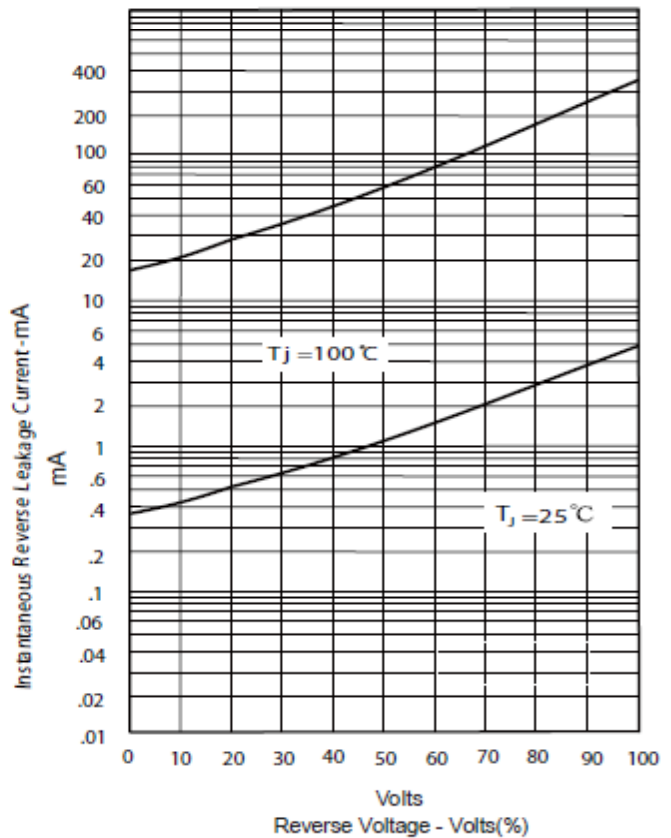
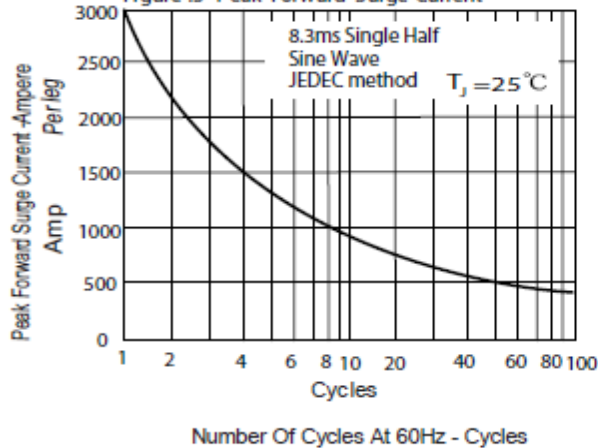
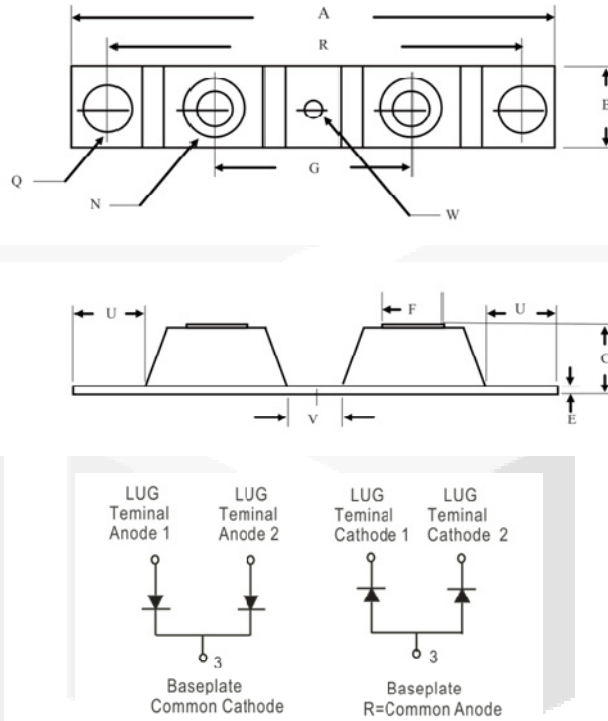


Figure .3- Peak Forward Surge Current



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