



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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## Silicon Super Fast Recovery Diode

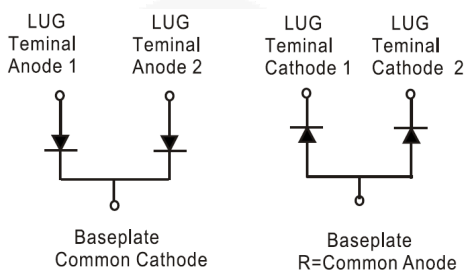
$V_{RRM} = 50 \text{ V} - 200 \text{ V}$

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

### Features

- High Surge Capability
- Types from 50 V to 200 V  $V_{RRM}$
- Not ESD Sensitive

TO-244 Package



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

Parameter	Symbol	Conditions	MURF40005(R)	MURF40010(R)	MURF40020(R)	Unit
Repetitive peak reverse voltage	$V_{RRM}$		50	100	200	V
RMS reverse voltage	$V_{RMS}$		35	70	140	V
DC blocking voltage	$V_{DC}$		50	100	200	V
Operating temperature	$T_j$		-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	MURF40005(R)	MURF40010(R)	MURF40020(R)	Unit
Average forward current (per pkg)	$I_{F(AV)}$	$T_C = 140^\circ\text{C}$	400	400	400	A
Peak forward surge current (per leg)	$I_{FSM}$	$t_p = 8.3 \text{ ms}$ , half sine	3300	3300	3300	A
Maximum instantaneous forward voltage (per leg)	$V_F$	$I_{FM} = 200 \text{ A}$ , $T_j = 25^\circ\text{C}$	1.0	1.0	1.0	V
Maximum reverse current at rated DC blocking voltage (per leg)	$I_R$	$T_j = 25^\circ\text{C}$	25	25	25	$\mu\text{A}$
		$T_j = 125^\circ\text{C}$	3	3	3	mA
Maximum reverse recovery time (per leg)	$T_{rr}$	$I_F = 0.5 \text{ A}$ , $I_R = 1.0 \text{ A}$ , $I_{RR} = 0.25 \text{ A}$	150	150	150	nS

### Thermal characteristics

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

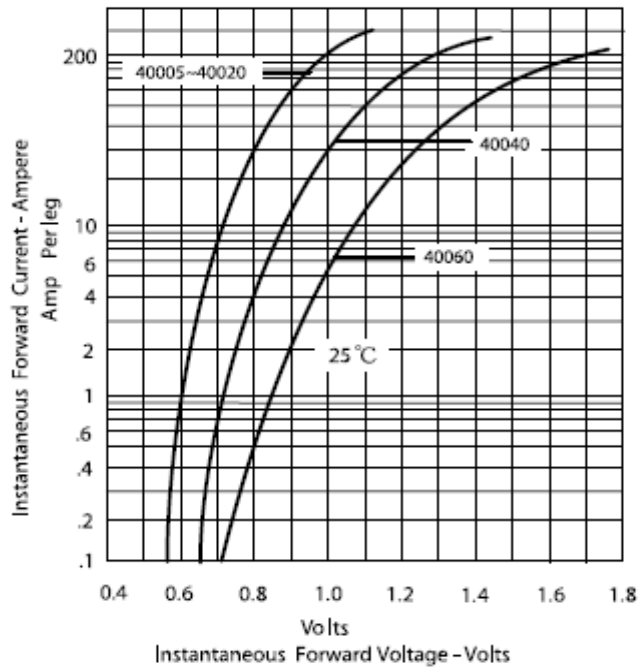


Figure .2- Forward Derating Curve

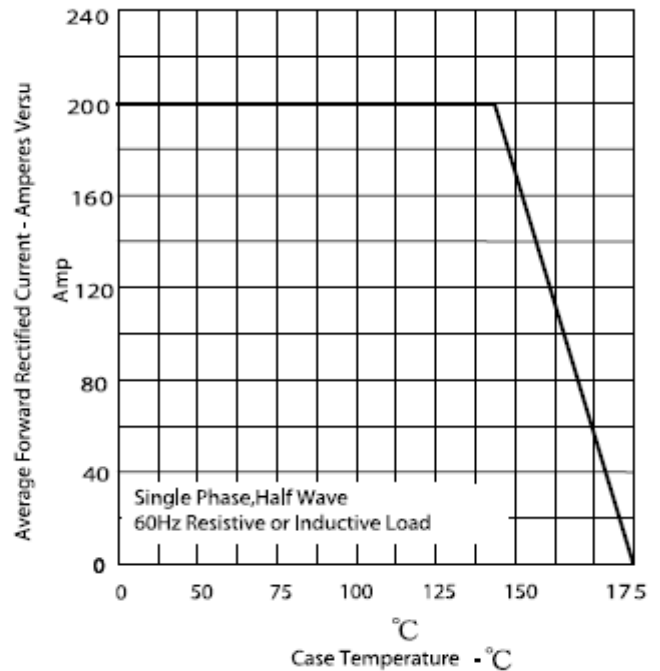


Figure.3- Peak Forward Surge Current

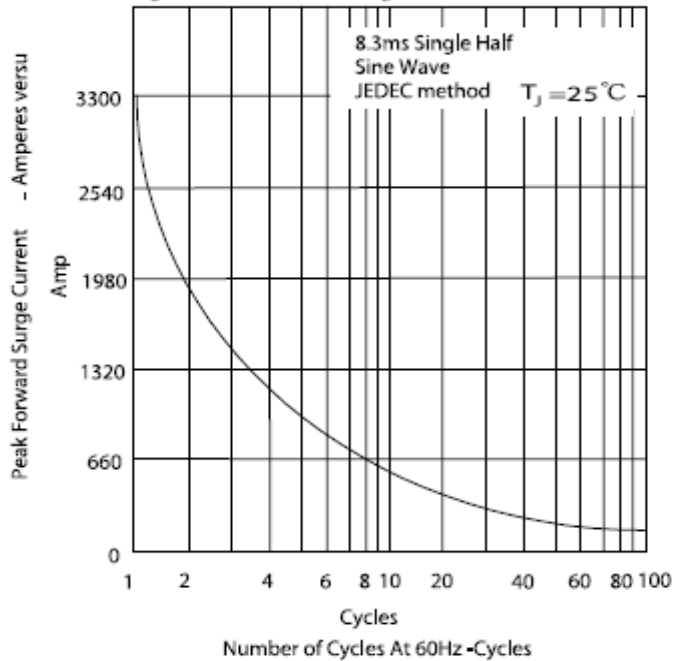
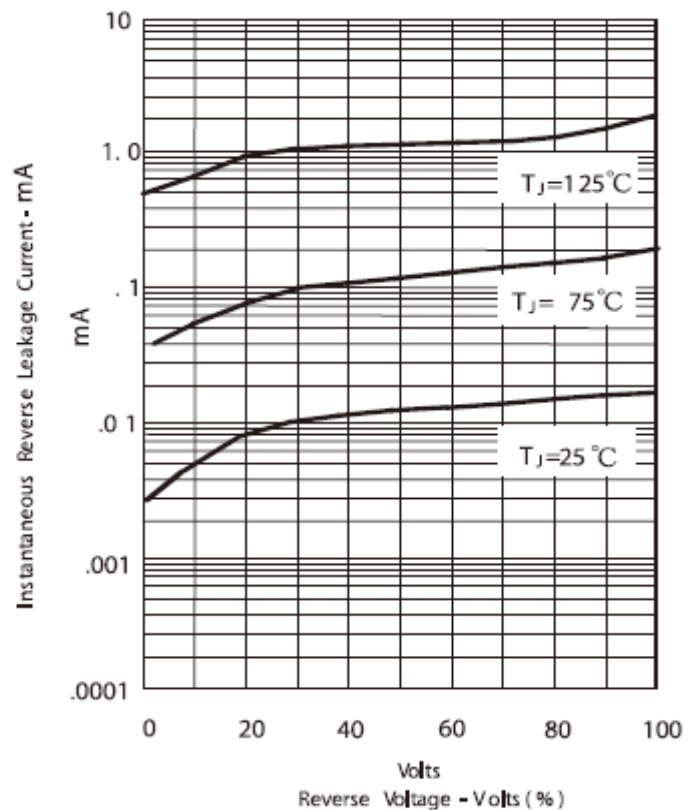


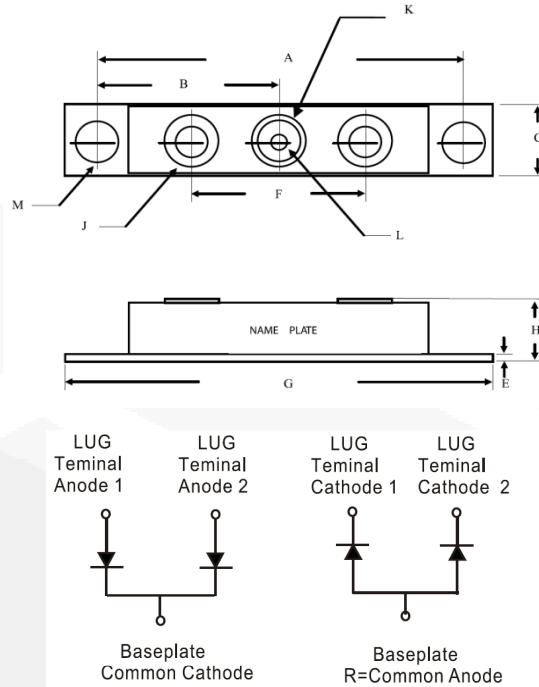
Figure .4-Typical Reverse Characteristics





## Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



DIM	Inches		Millimeters	
	Min	Max	Min	Max
A	3.144	NOM	79.85	NOM
B	1.565	1.585	39.75	40.26
C	0.700	0.800	17.78	20.32
E	0.119	0.14	3.02	3.50
F	1.358	REF.	34.50	REF.
G	3.55	3.65	90.17	92.71
H	0.604	0.65	15.35	16.51
J	1/4-20 UNC FULL			
K	0.380	0.410	9.65	10.41
L	0.185	0.195	4.70	4.95
M	0.275	0.295	6.99	7.49