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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

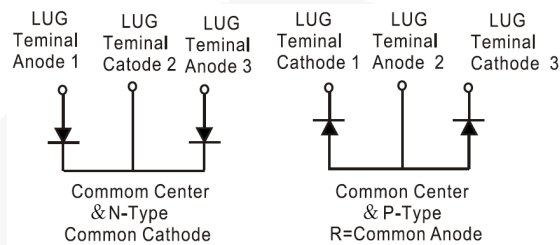
$V_{RRM} = 600\text{ V} - 1200\text{ V}$

$I_{F(AV)} = 500\text{ A}$

### Features

- High Surge Capability
- Types from 600 V to 1200 V  $V_{RRM}$
- Isolation Type Package
- Electrically Isolated Base Plate
- Not ESD Sensitive

### Heavy Three Tower Package



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

Parameter	Symbol	Conditions	MURTA50060(R)	MURTA500120(R)	Unit
Repetitive peak reverse voltage	$V_{RRM}$		600	1200	V
RMS reverse voltage	$V_{RMS}$		424	---	V
DC blocking voltage	$V_{DC}$		600	1200	V
Operating temperature	$T_j$		-55 to 150	-55 to 150	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-55 to 150	-55 to 150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	MURTA50060(R)	MURTA500120(R)	Unit
Average forward current (per pkg)	$I_{F(AV)}$	$T_C = 100\text{ }^\circ\text{C}$	500	500	A
Peak forward surge current (per leg)	$I_{FSM}$	$t_p = 8.3\text{ ms}$ , half sine	3800	3800	A
Maximum instantaneous forward voltage (per leg)	$V_F$	$I_{FM} = 250\text{ A}$ , $T_j = 25\text{ }^\circ\text{C}$	1.7	2.6	V
Maximum instantaneous reverse current at rated DC blocking voltage (per leg)	$I_R$	$T_j = 25\text{ }^\circ\text{C}$	25	25	$\mu\text{A}$
		$T_j = 125\text{ }^\circ\text{C}$	5	5	mA
Maximum reverse recovery time (per leg)	$T_{rr}$	$I_F = 0.5\text{ A}$ , $I_R = 1.0\text{ A}$ , $I_{RR} = 0.25\text{ A}$	250	250	ns

### Thermal characteristics

Maximum thermal resistance, junction - case (per leg)	$R_{\theta JC}$		0.30	0.30	$^\circ\text{C/W}$
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## MURTA50060(R) Figures:

Figure .1- Typical Forward Characteristics

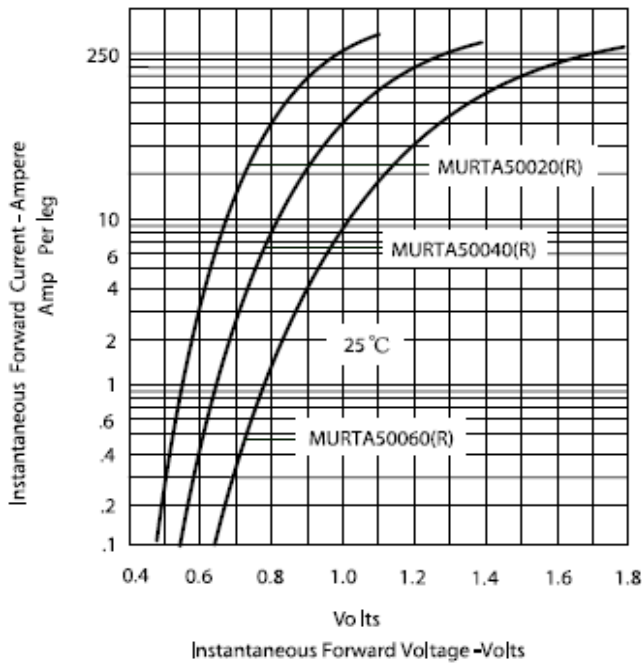


Figure .2- Forward Derating Curve

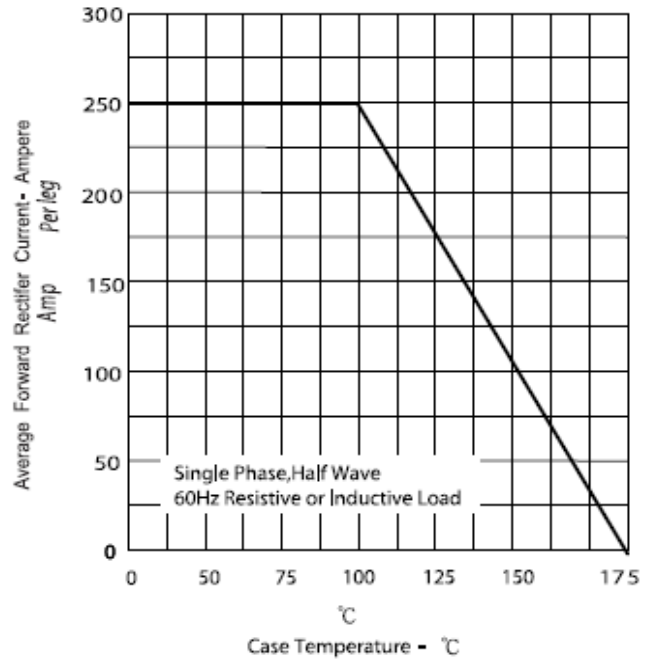


Figure .3- Peak Forward Surge Current

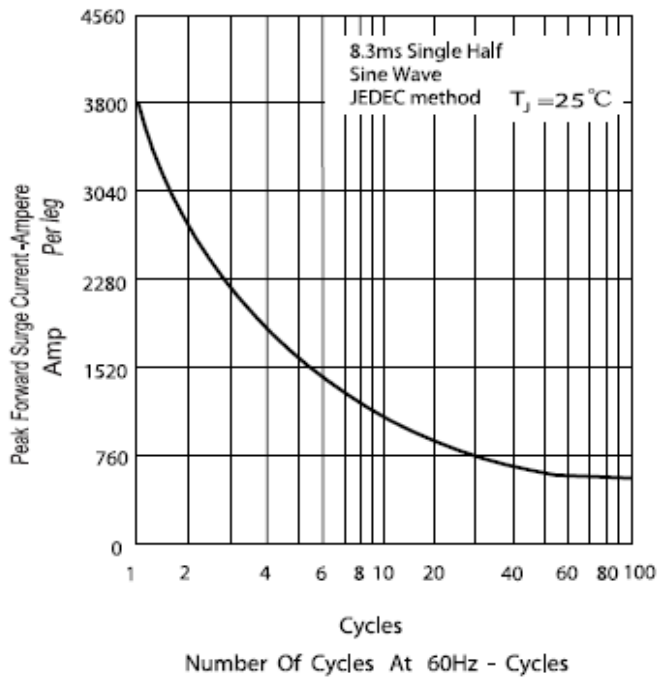
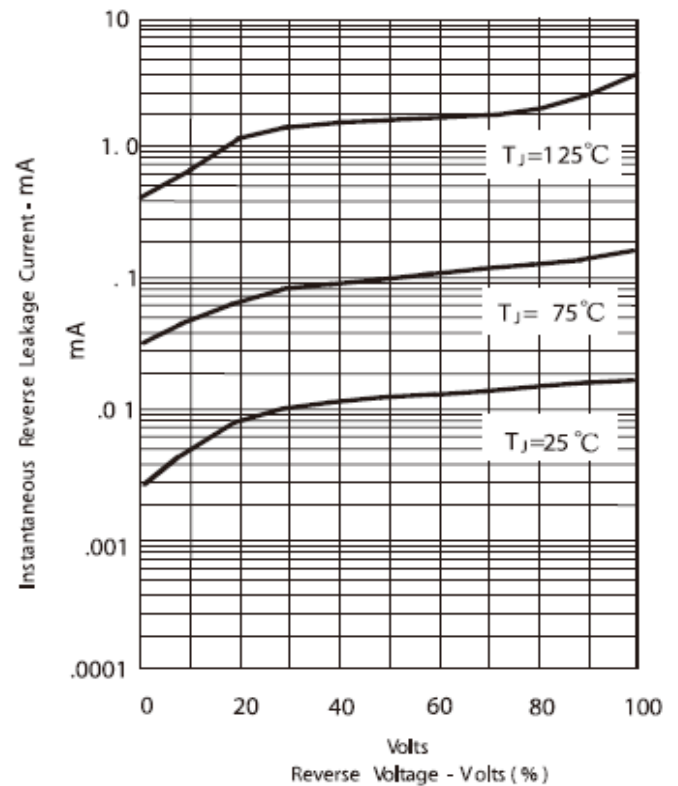


Figure .4- Typical Reverse Characteristics



**MURTA500120(R) Figures:**

Figure .1- Typical Forward Characteristics

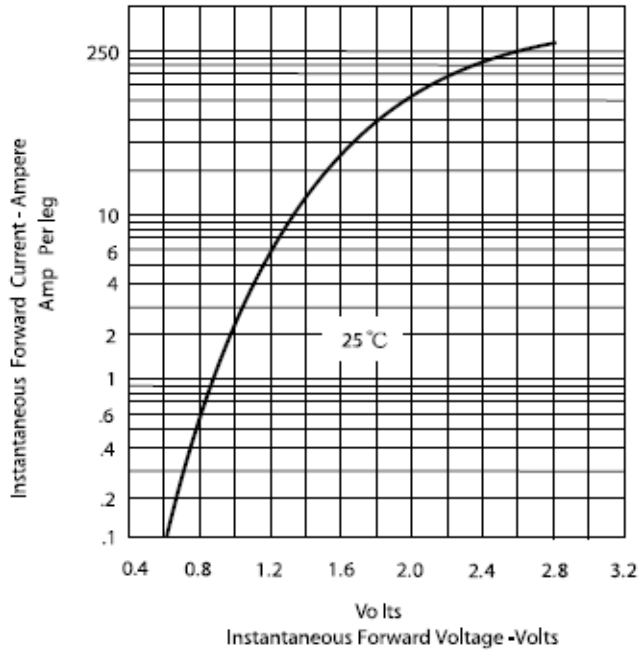


Figure .2- Forward Derating Curve

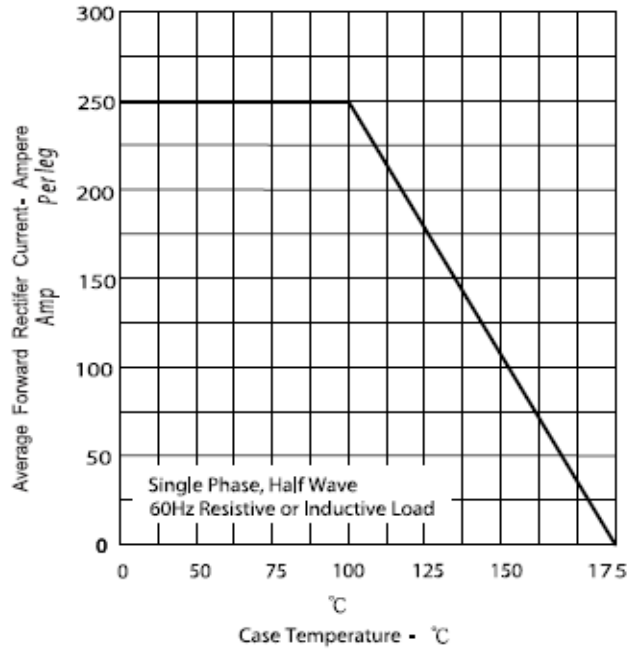


Figure .3- Peak Forward Surge Current

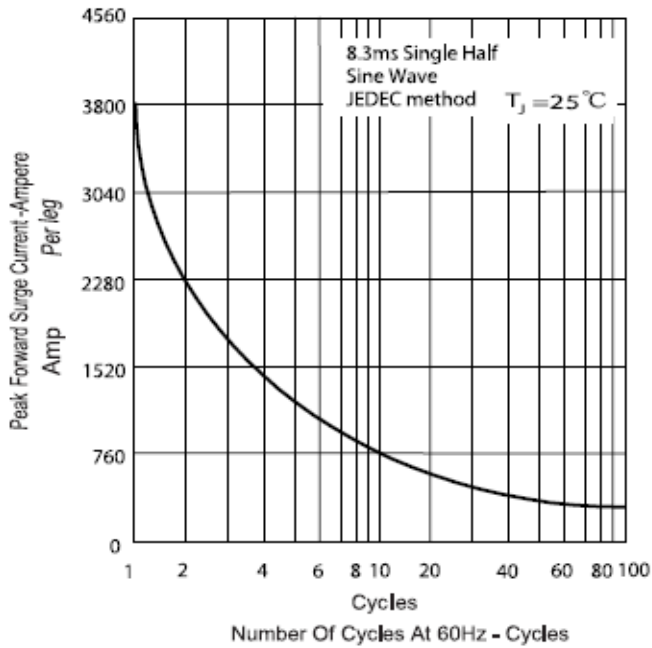
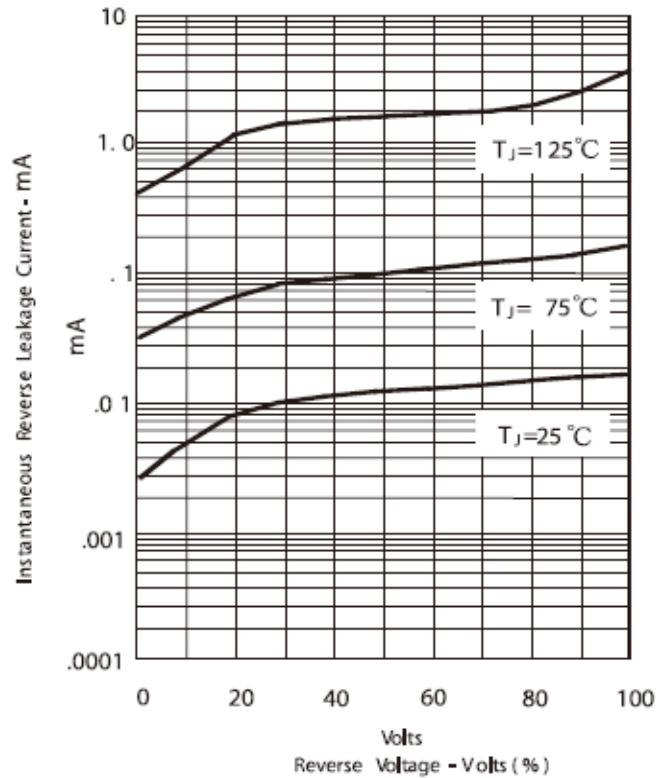
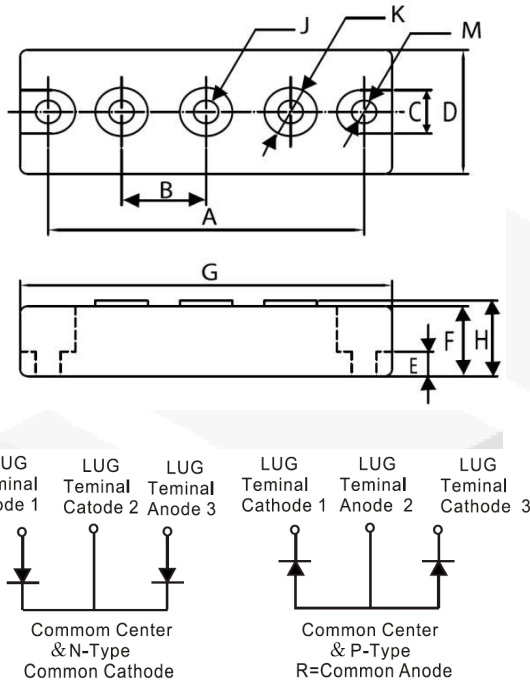


Figure .4 -Typical Reverse Characteristics



## Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



DIMENSIONS				
DIM	Inches		Millimeters	
	Min	Max	Min	Max
A	3.150	NOM	80.01	NOM
B	.872	.892	22.15	22.65
C	.465	.479	11.82	12.18
D	1.337	1.356	33.95	34.45
E	.230	.234	5.84	6.16
F	.725	REF	18.42	REF
G	3.668	3.768	93.17	95.71
H	—	.791	—	20.10
J	1/4-20 UNC FULL			
K	.509	.538	12.92	13.68
M	.238	.258	6.05	6.55