MURTA30060 thru MURTA300120R

Silicon Super Fast Recovery Diode

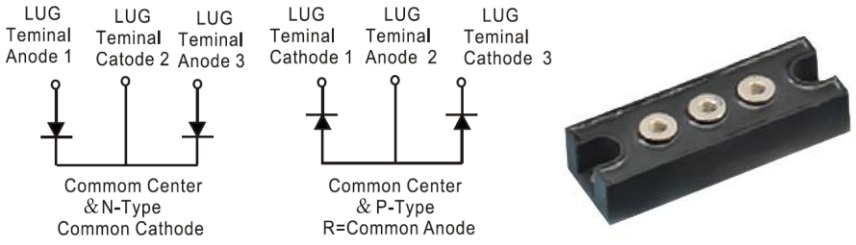
V_{RRM} = 600 V - 1200 V

$I_{F(AV)}$ = 300 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 °C, unless otherwise specified ("R" devices have leads reversed)

Parameter	Symbol	Conditions	MURTA30060(R)	MURTA300120(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	°C
Storage temperature	T_{stg}		-55 to 150	-55 to 150	°C

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

Parameter	Symbol	Conditions	MURTA30060(R)	MURTA300120(R)	Unit
Average forward current (per pkg)	$I_{F(AV)}$	T_C = 100 °C	300	300	A
Peak forward surge current (per leg)	I_{FSM}	t_p = 8.3 ms, half sine	2750	2750	A
Maximum instantaneous forward voltage (per leg)	V_F	I_{FM} = 150 A, T_j = 25 °C	1.7	2.6	V
Maximum instantaneous reverse current at rated DC blocking voltage (per leg)	I_R	T_j = 25 °C	25	25	µA
		T_j = 125 °C	5	5	mA
Maximum reverse recovery time (per leg)	T_{rr}	I_F=0.5 A, I_R=1.0 A, I_{RR}= 0.25 A	150	150	ns
Thermal characteristics					
Maximum thermal resistance, junction - case (per leg)	$R_{\Theta JC}$		0.40	0.40	°C/W

MURTA30060(R) Figures:

Figure .1- Typical Forward Characteristics

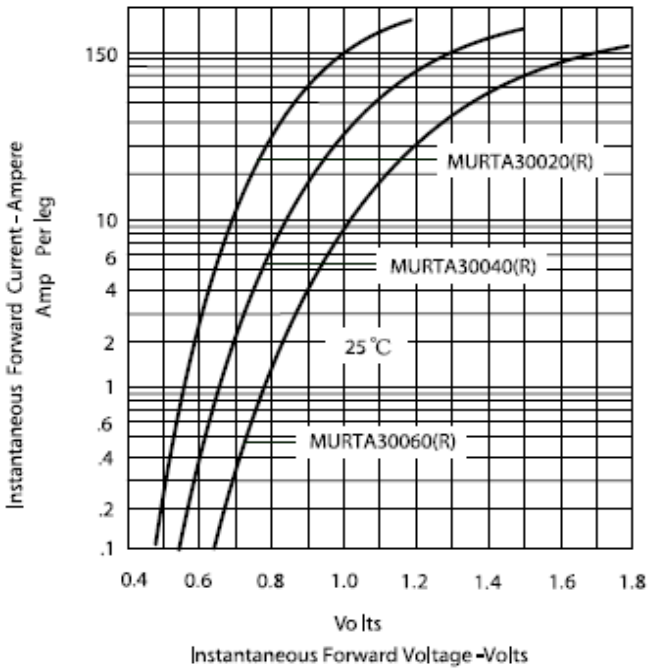


Figure .2- Forward Derating Curve

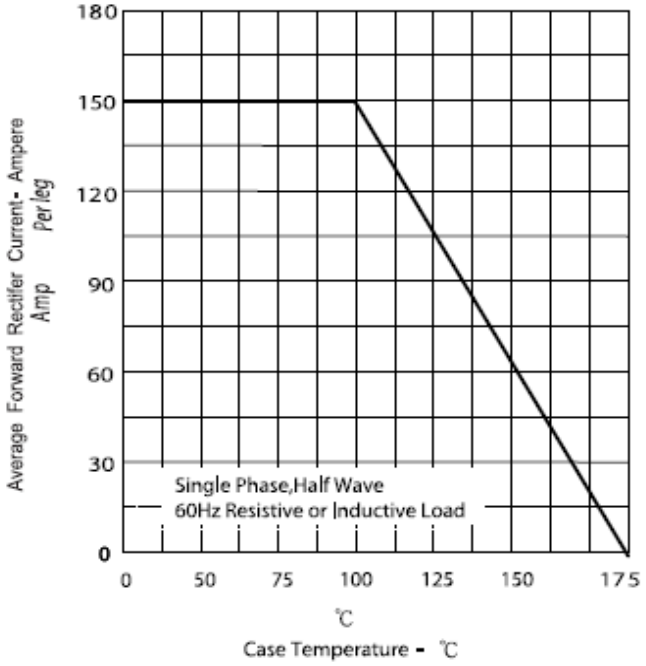


Figure .3- Peak Forward Surge Current

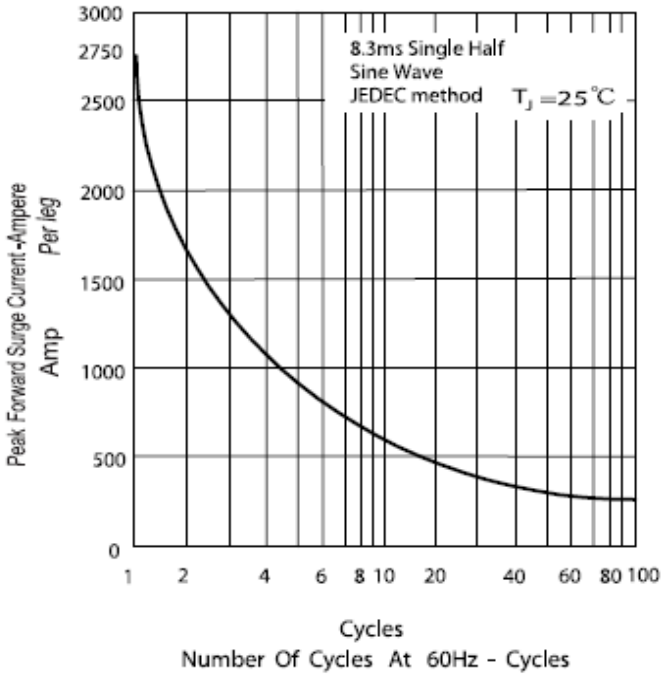
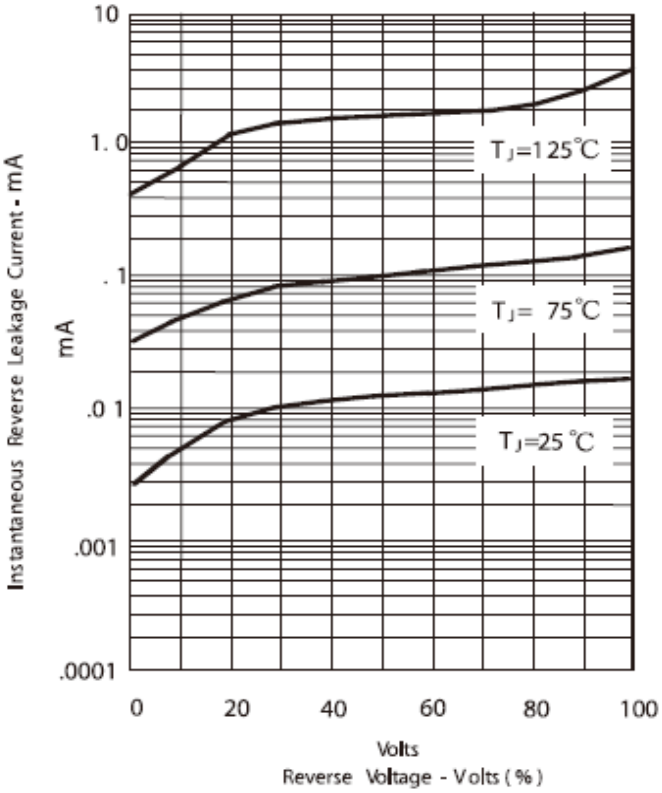


Figure .4 -Typical Reverse Characteristics



MURTA300120(R) Figures:

Figure .1- Typical Forward Characteristics

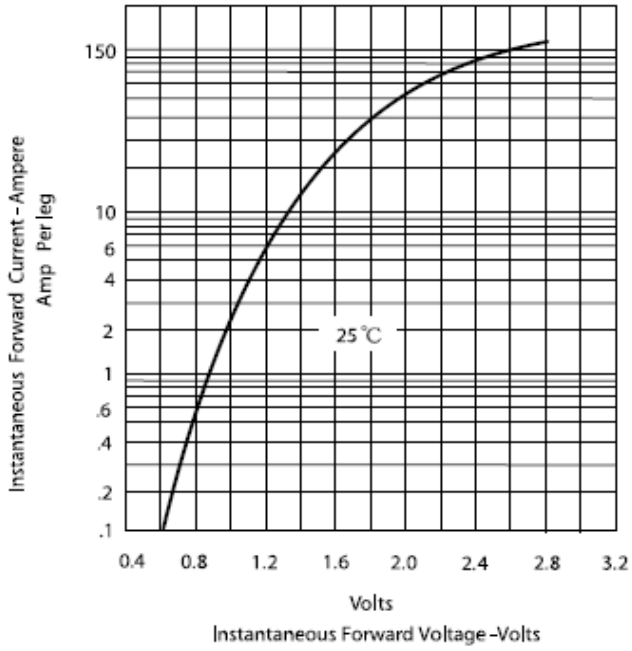


Figure .2- Forward Derating Curve

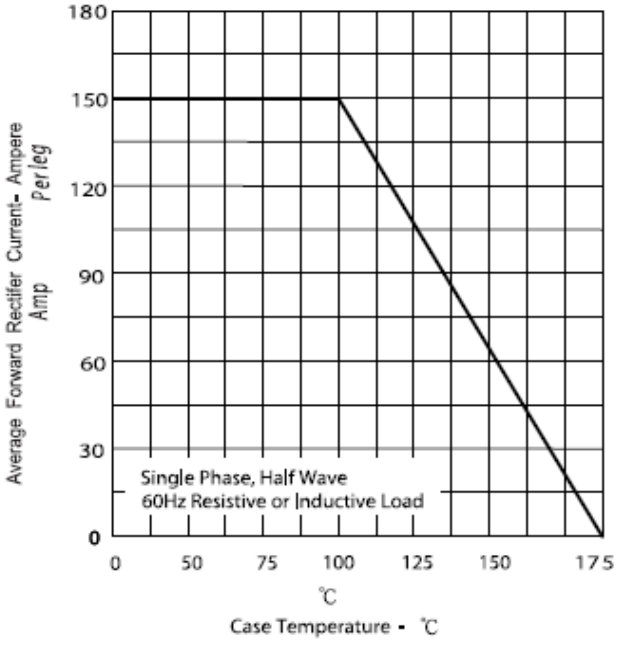


Figure .3- Peak Forward Surge Current

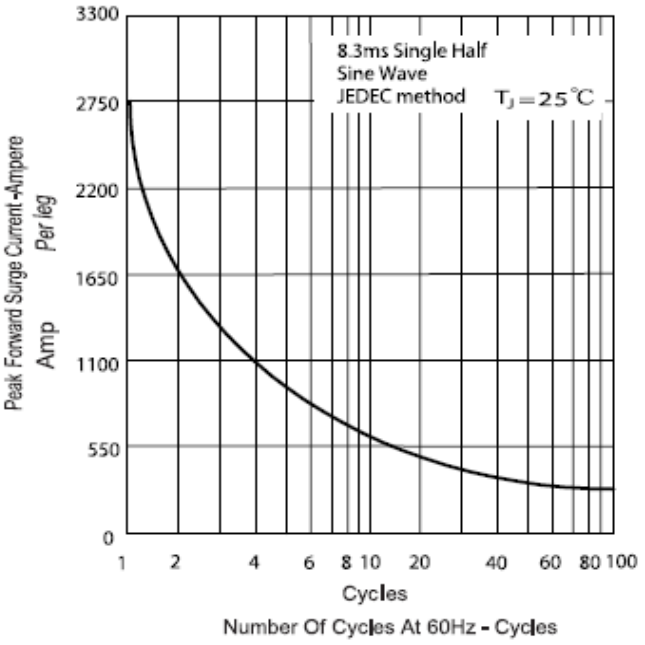
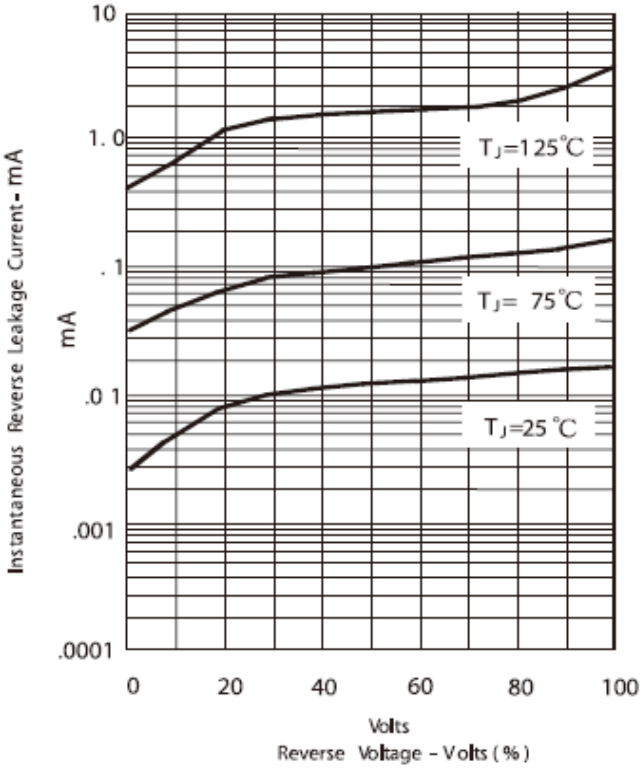
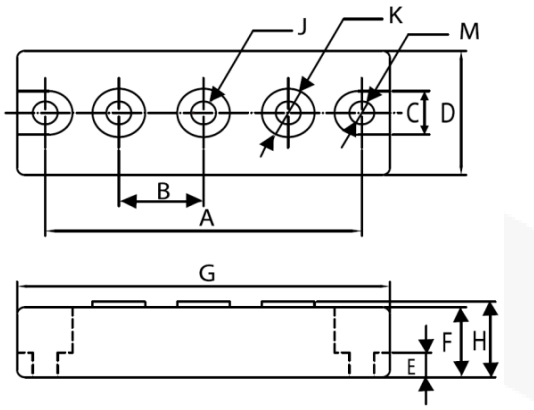


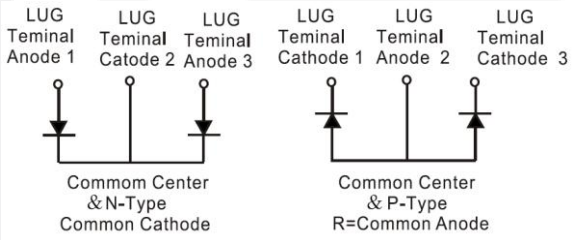
Figure .4 -Typical Reverse Characteristics



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