MURT20040 thru MURT20060R

Silicon Super Fast Recovery Diode

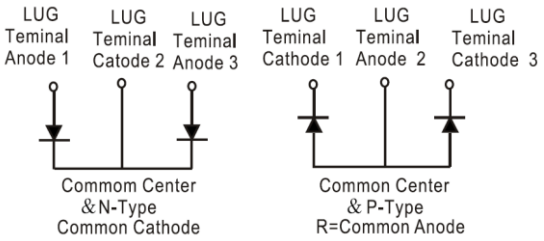
V_{RRM} = 400 V - 600 V

$I_{F(AV)}$ = 200 A

Features

- High Surge Capability
- Types from 400 V to 600 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	MURT20040(R)	MURT20060(R)	Unit
Repetitive peak reverse voltage	V_{RRM}		400	600	V
RMS reverse voltage	V_{RMS}		283	424	V
DC blocking voltage	V_{DC}		400	600	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	MURT20040(R)	MURT20060(R)	Unit
Average forward current (per pkg)	$I_{F(AV)}$	T_C = 140 °C	200	200	A
Peak forward surge current (per leg)	I_{FSM}	t_p = 8.3 ms, half sine	2000	2000	A
Maximum instantaneous forward voltage (per leg)	V_F	I_{FM} = 100 A, T_j = 25 °C	1.3	1.7	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	1	1	mA
Maximum reverse recovery time (per leg)	T_{rr}	I_F=0.5 A, I_R=1.0 A, I_{RR}= 0.25 A	90	110	nS
Thermal characteristics					
Maximum thermal resistance, junction - case (per leg)	$R_{\Theta JC}$		0.45	0.45	°C/W

Figure .1- Typical Forward Characteristics

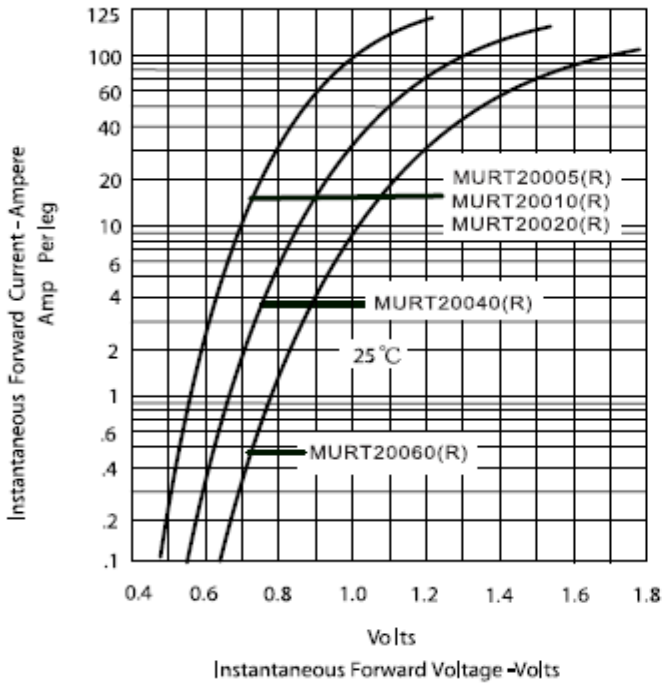


Figure .2- Forward Derating Curve

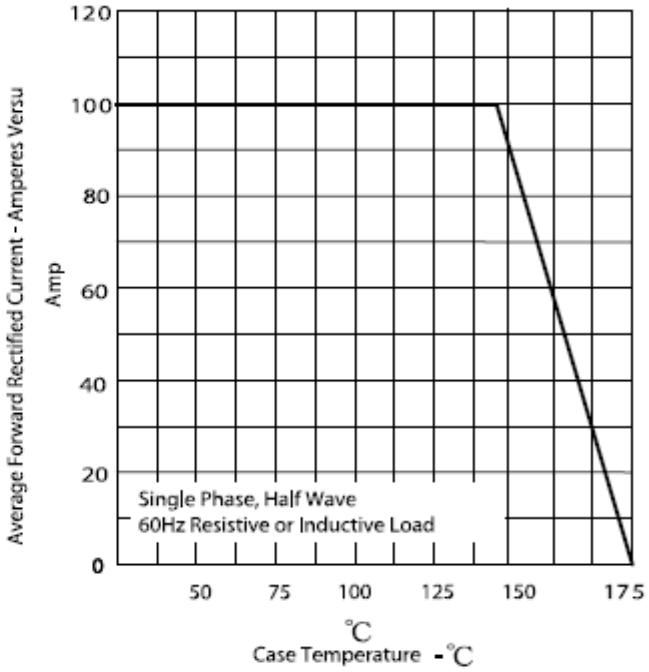


Figure.3- Peak Forward Surge Current

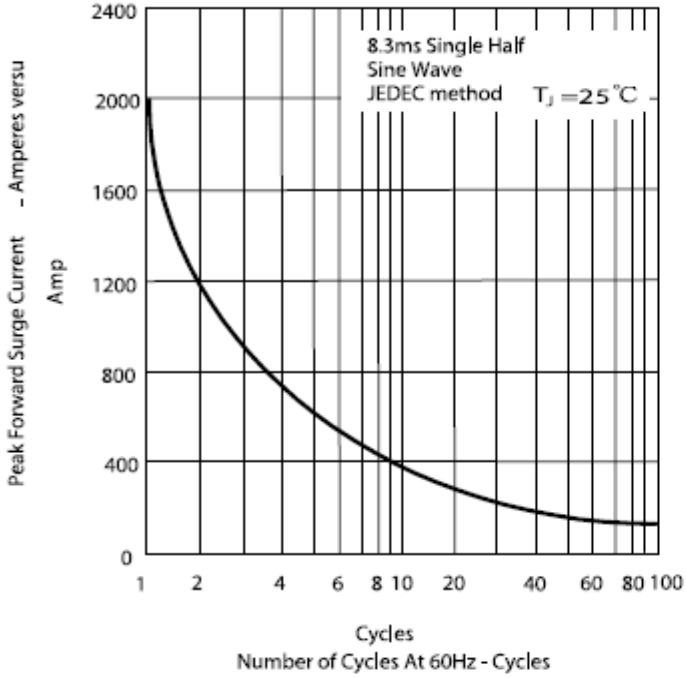
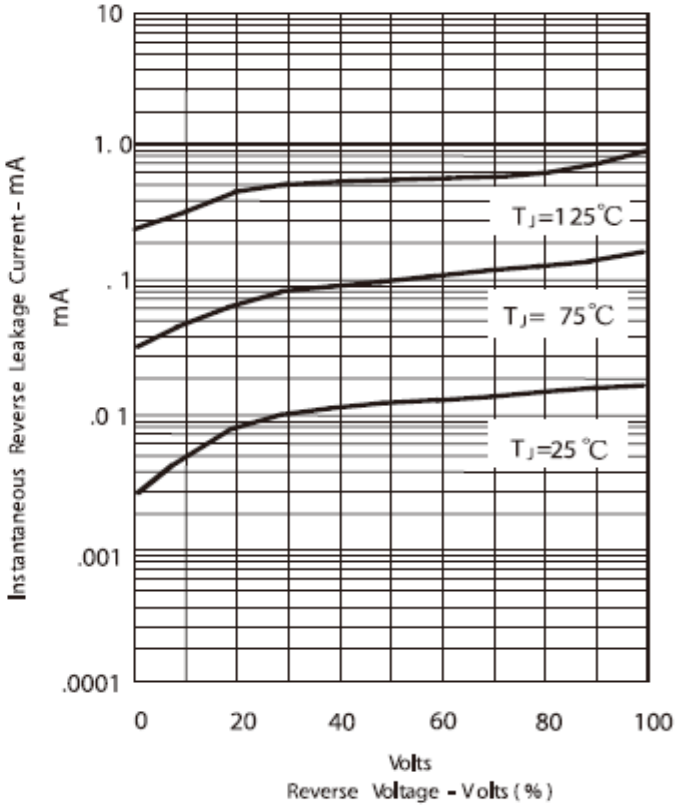
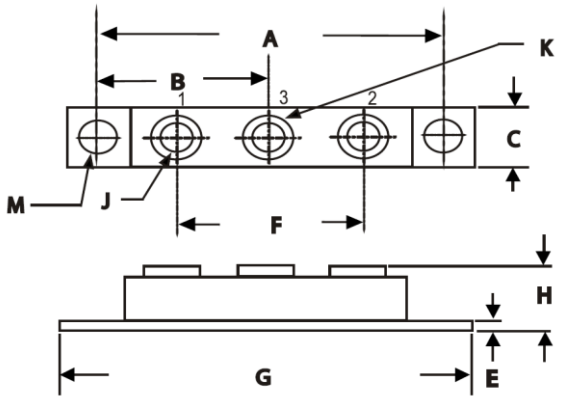


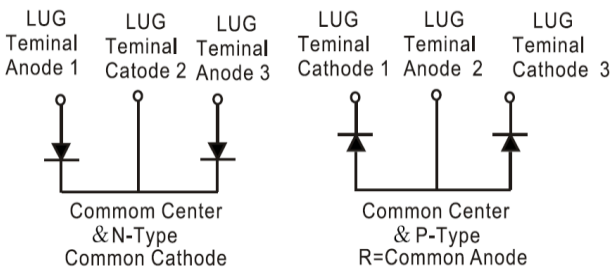
Figure .4 -Typical Reverse Characteristics



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.





DIM	Inches		Millimeters	
	Min	Max	Min	Max
A	3.150	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