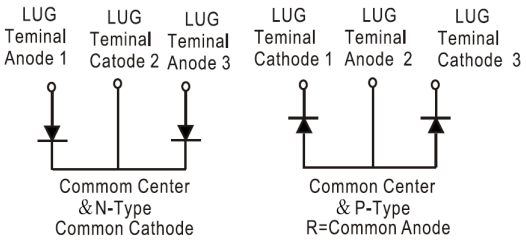
Silicon Super Fast Recovery Diode

V_{RRM} = 50 V - 200 V

I_F = 200 A

Features

- High Surge Capability
- Types from 50 V to 200 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	MURT20005(R)	MURT20010(R)	MURT20020(R)	Unit
Repetitive peak reverse voltage	V_{RRM}		50	100	200	V
RMS reverse voltage	V_{RMS}		35	71	141	V
DC blocking voltage	V_{DC}		50	100	200	V
Operating temperature	T_j		-55 to 150	-55 to 150	-55 to 150	°C
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150	°C

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

Parameter	Symbol	Conditions	MURT20005(R)	MURT20010(R)	MURT20020(R)	Unit
Average forward current (per pkg)	$I_{F(AV)}$	T_C = 140 °C	200	200	200	A
Peak forward surge current (per leg)	I_{FSM}	t_p = 8.3 ms, half sine	2000	2000	2000	A
Maximum instantaneous forward voltage (per leg)	V_F	I_{FM} = 100 A, T_j = 25 °C	1.0	1.0	1.0	V
Maximum instantaneous reverse current at rated DC blocking voltage (per leg)	I_R	T_j = 25 °C	25	25	25	µA
		T_j = 125 °C	1	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	75	75	75	nS
Thermal characteristics						
Thermal resistance, junction - case (per leg)	$R_{\Theta JC}$		0.45	0.45	0.45	°C/W

Figure .1- Typical Forward Characteristics

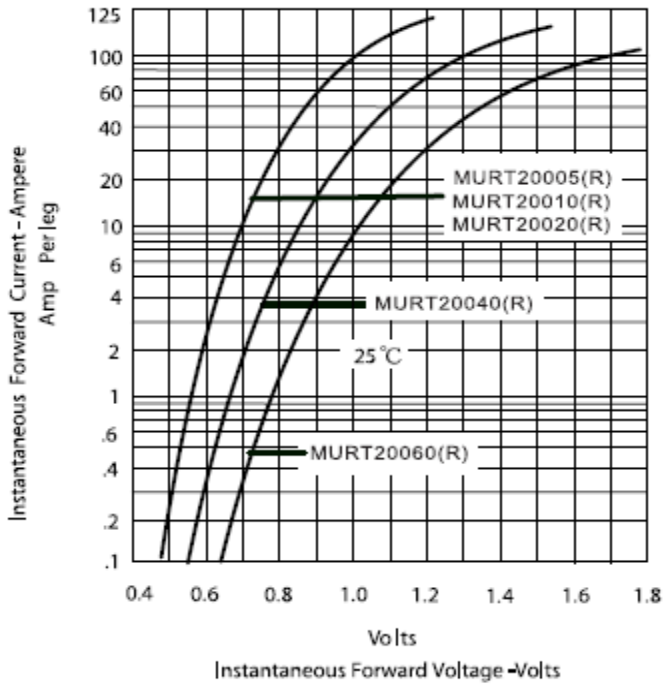


Figure .2- Forward Derating Curve

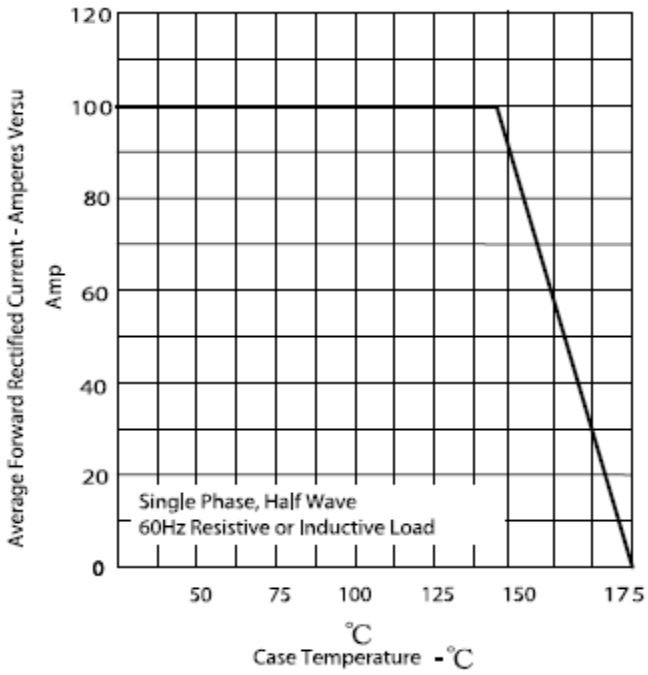


Figure.3- Peak Forward Surge Current

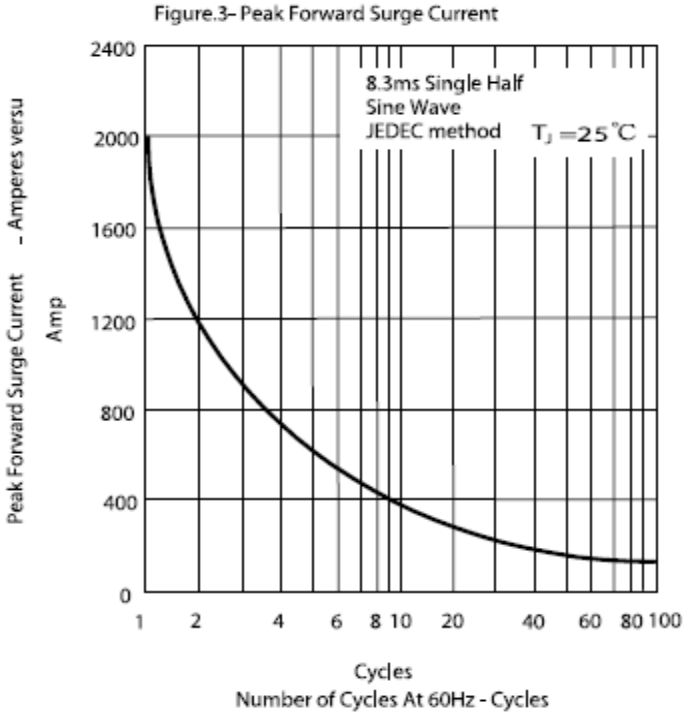
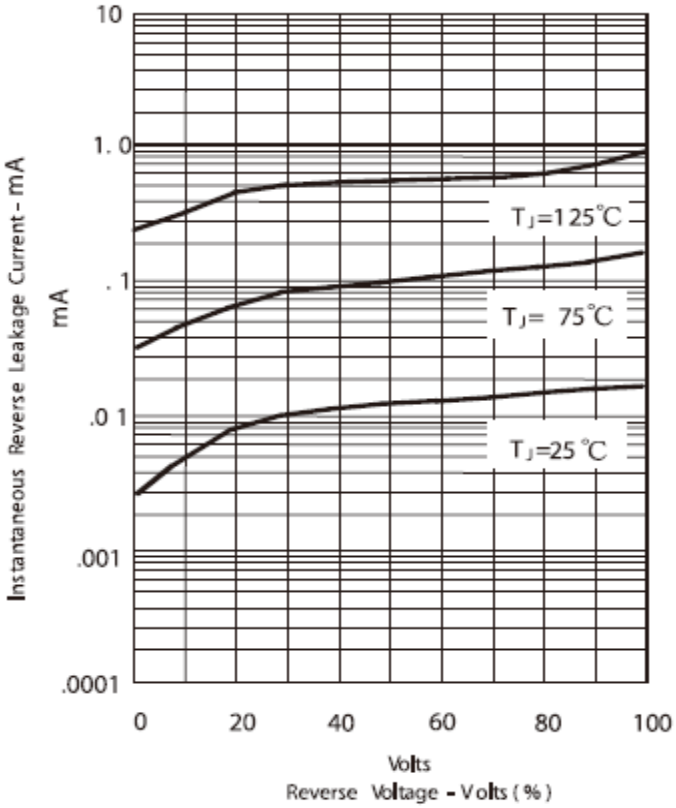
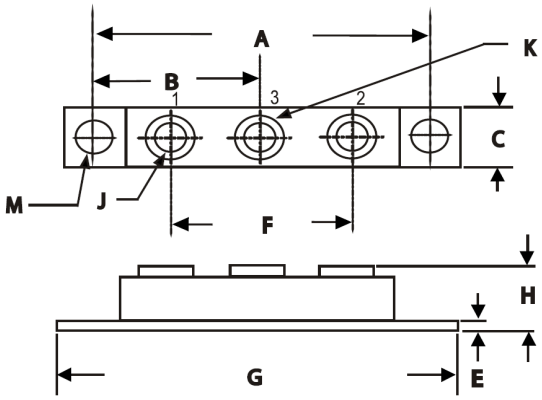


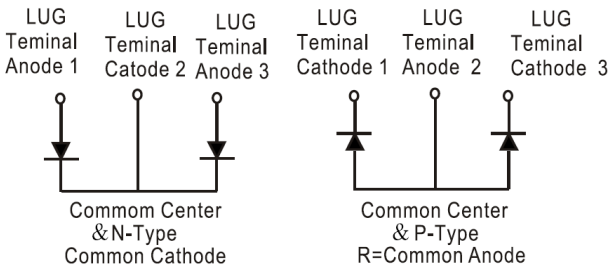
Figure .4 -Typical Reverse Characteristics



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	.700	.800	17.78	20.32
E	.119	.132	3.02	3.35
F	1.327	REF	33.72	REF
G	3.550	3.65	90.17	92.71
H	—	.73	—	18.30
J	1/4-20 UNC FULL			
K	.472	.511	12.00	13.00
M	.275	.295	6.99	7.49
N	2.380	2.46	60.50	62.50