MUR105 THRU MUR160

ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE:50 TO 600V **CURRENT: 1.0A**

GULF SEMI

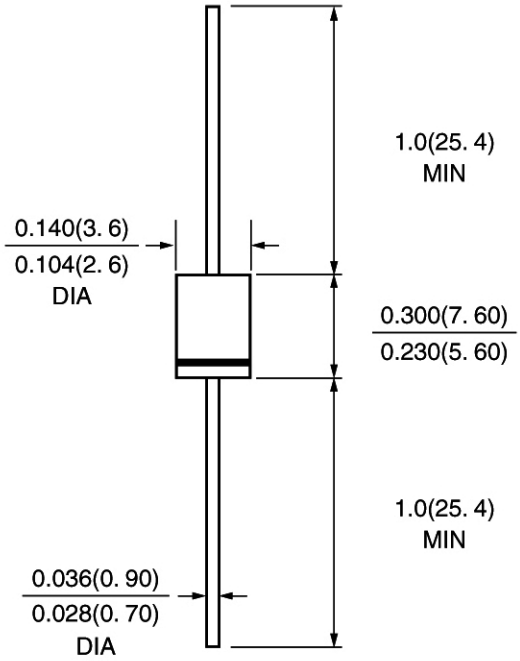
FEATURE

- Ultrafast Nanosecond Recovery Times
- 150°C Operating Junction Temperature
- Low Forward Voltage
- Low Leakage Current
- High Temperature Glass Passivated Junction

Mechanical Characteristics

- Case: Epoxy, Molded
- Weight: 0.4 gram (approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- solder heat resistance :265degreeC Max. for 10 Seconds, 1/16 from case
- Polarity: Cathode Indicated by Polarity Band

DO-15



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	MUR 105	MUR 110	MUR 120	MUR 130	MUR 140	MUR 160	units
Maximum Rec*urrent* Peak Reverse Voltage	Vrrm	50	100	200	300	400	600	V
Maximum RMS Voltage	Vrms	35	70	140	210	280	420	V
Maximum DC blocking Voltage	Vdc	50	100	200	300	400	600	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	If(av)	1.0						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	35						A
Maximum Forward Voltage at rated Forward Current and 25°C	Vf	0.875			1.25			V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	10 50						µA µA
Maximum Reverse Recovery Time (Note 1)	Trr	25			50			nS
Typical Junction Capacitance (Note 2)	Cj	25						pF
Typical Thermal Resistance (Note 3)	R(ja)	27			50			°C /W
Storage and Operating Temperature Range	Tstg, Tj	-55 to +150						°C

Note:

1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

[1]

Fig. 1 – Forward Current Derating Curve

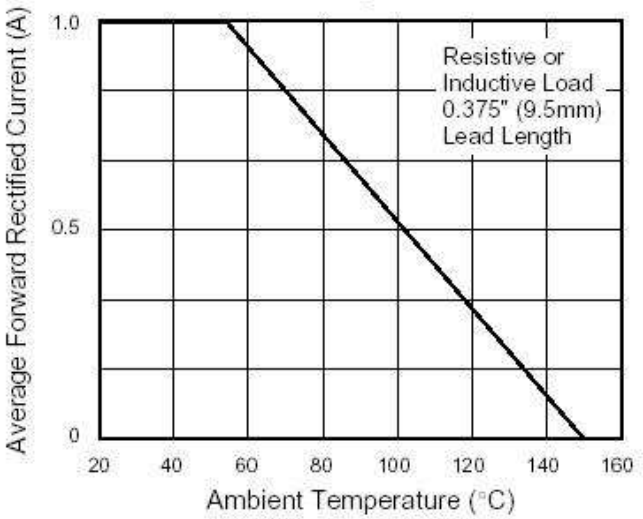


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

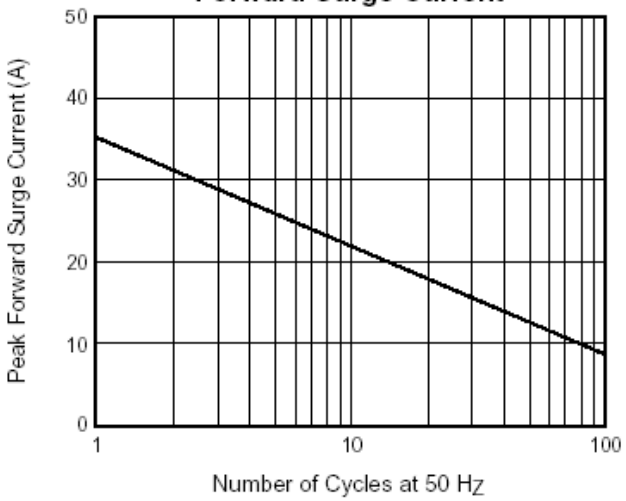


Fig. 3 – Typical Instantaneous Forward Characteristics

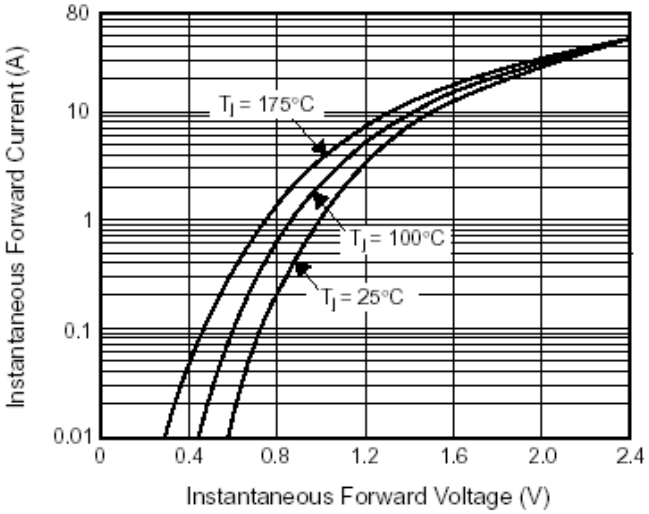


Fig. 4 – Typical Reverse Leakage Characteristics

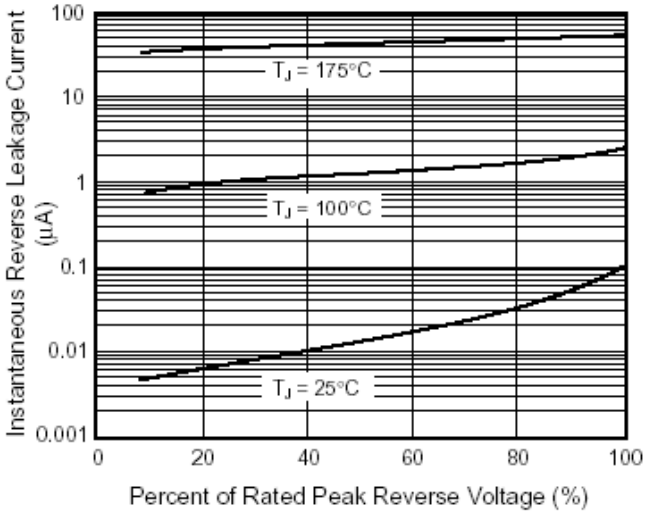


Fig. 5 – Typical Junction Capacitance