MUR120-44C

ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE:200V **CURRENT: 1.0A**

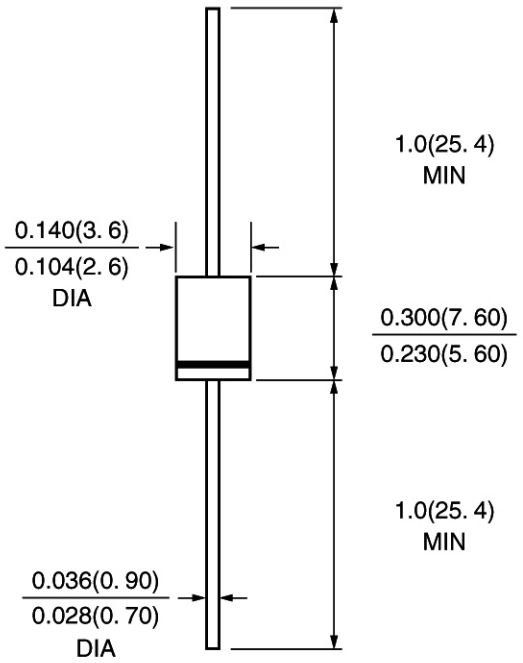
FEATURE

- 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, 1/16from 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	MUR120-44C	units
Maximum Rec*urrent* Peak Reverse Voltage	Vrrm	200	V
Maximum RMS Voltage	Vrms	140	V
Maximum DC blocking Voltage	Vdc	200	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	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	2.0 50	μA μA
Maximum Reverse Recovery Time (Note 1)	Trr	25	nS
Typical Junction Capacitance (Note 2)	Cj	25	pF
Typical Thermal Resistance (Note 3)	Rth(ja)	27	°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

RATINGS AND CHARACTERISTIC MURVES MUR120-44C

[1]

Fig. 1 – Forward Current Derating Curve

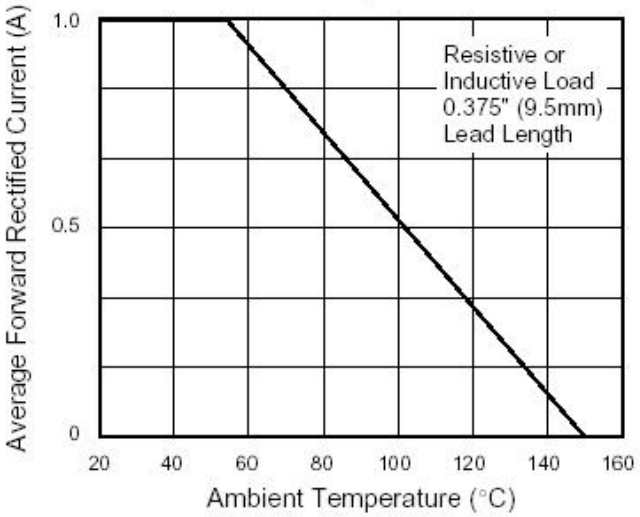


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

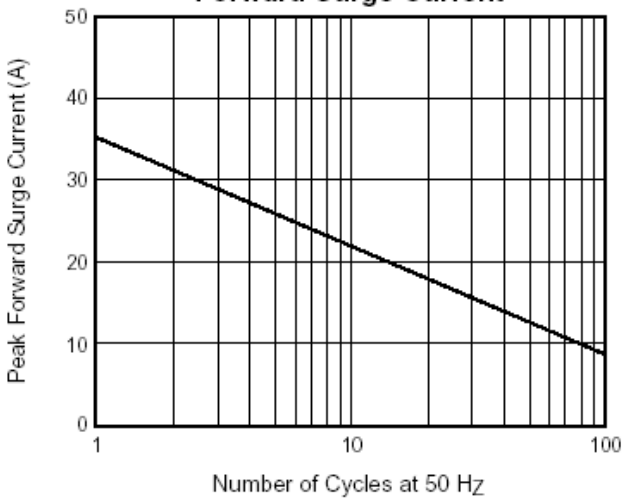


Fig. 3 – Typical Instantaneous Forward Characteristics

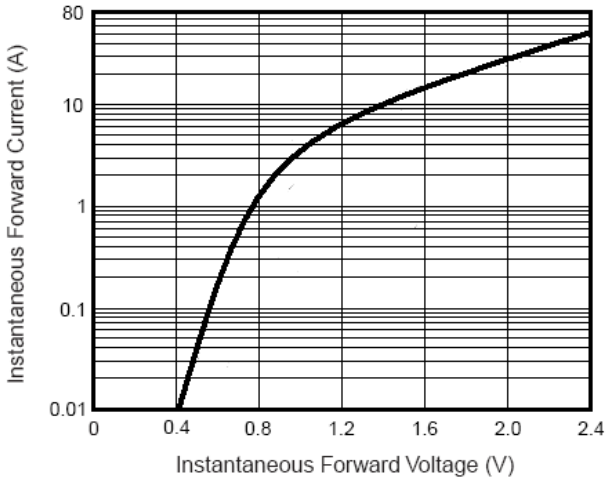


Fig. 4 – Typical Reverse Leakage Characteristics

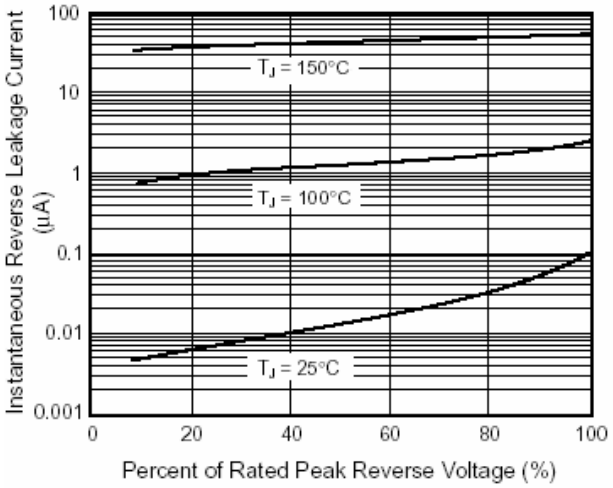
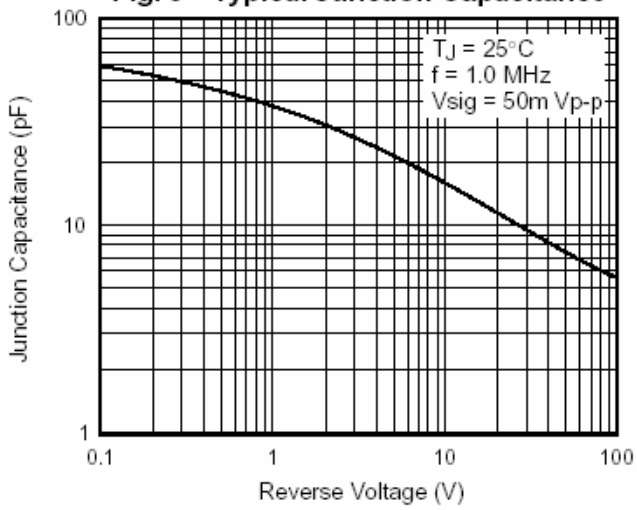


Fig. 5 – Typical Junction Capacitance



[1] Rev.A1, Nov-13-12