

MUR105 THRU MUR160

ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE: 50 TO 600V

CURRENT: 1.0A

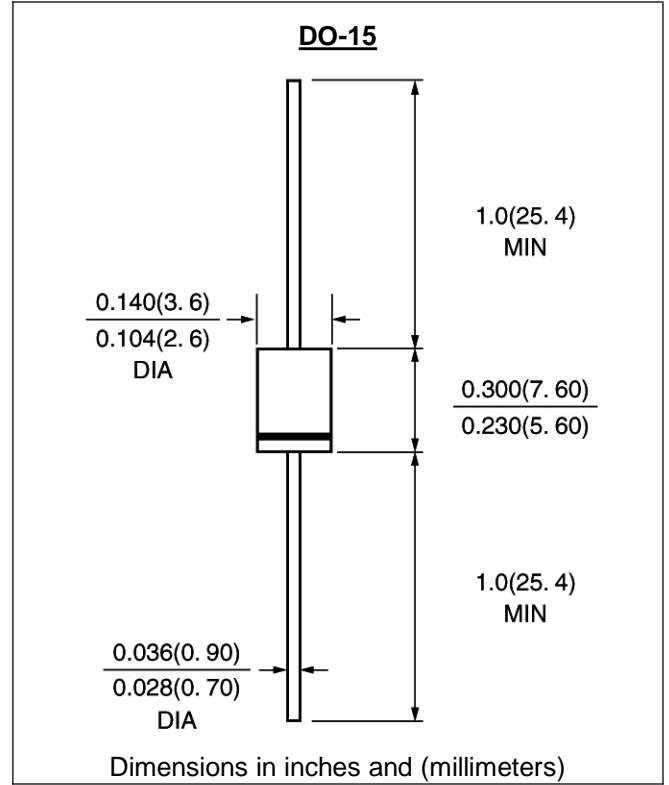


FEATURE

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, 1/16" from case
Polarity: Cathode Indicated by Polarity Band



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 Recurrent Peak Reverse Voltage	V _{rrm}	50	100	200	300	400	600	V
Maximum RMS Voltage	V _{rms}	35	70	140	210	280	420	V
Maximum DC blocking Voltage	V _{dc}	50	100	200	300	400	600	V
Maximum Average Forward Rectified Current 3/8" lead length at Ta =55°C	I _{f(av)}	1.0						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	35						A
Maximum Forward Voltage at rated Forward Current and 25°C	V _f	0.875			1.25			V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I _r	10			50			μA μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	25			50			nS
Typical Junction Capacitance (Note 2)	C _j	25						pF
Typical Thermal Resistance (Note 3)	R(ja)	27			50			°C /W
Storage and Operating Temperature Range	T _{stg} , T _j	-55 to +150						°C

Note:

1. Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =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

Fig. 1 – Forward Current Derating Curve

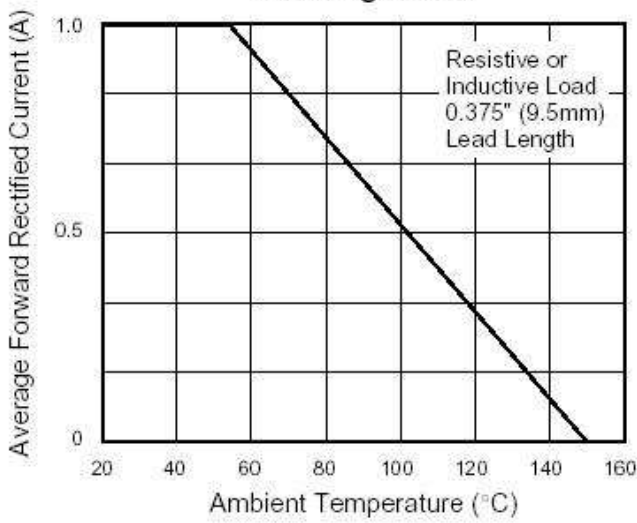


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

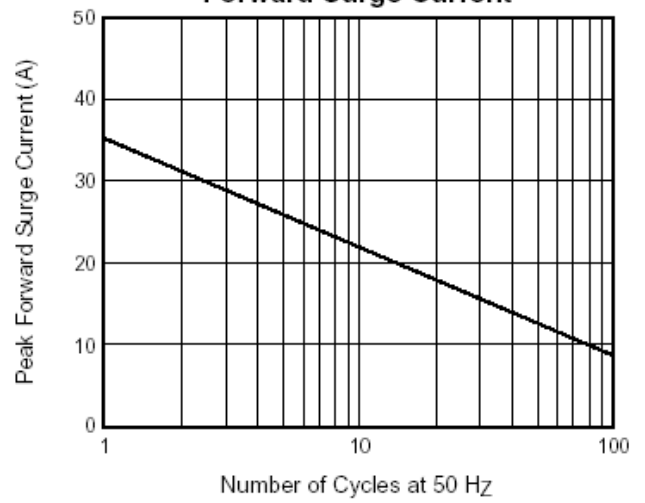


Fig. 3 – Typical Instantaneous Forward Characteristics

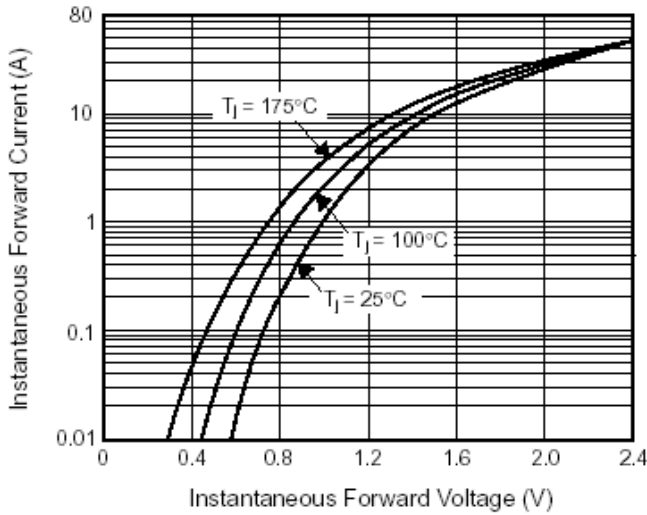


Fig. 4 – Typical Reverse Leakage Characteristics

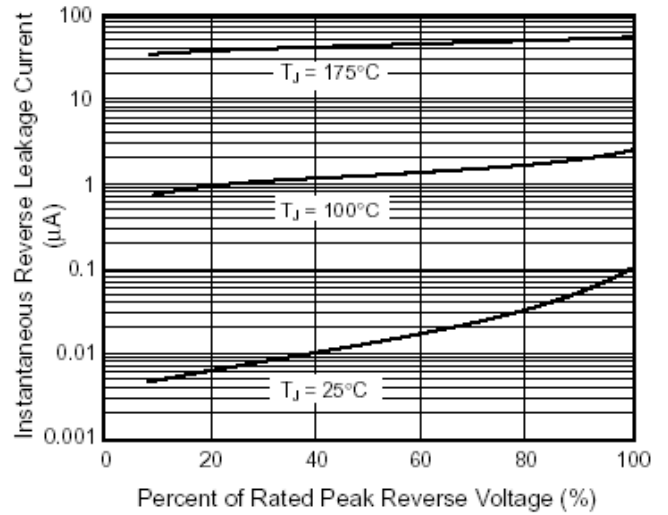


Fig. 5 – Typical Junction Capacitance

