



ULTRA FAST RECOVERY RECTIFIER
VOLTAGE- 400 Volts CURRENT - 2.0 Amperes



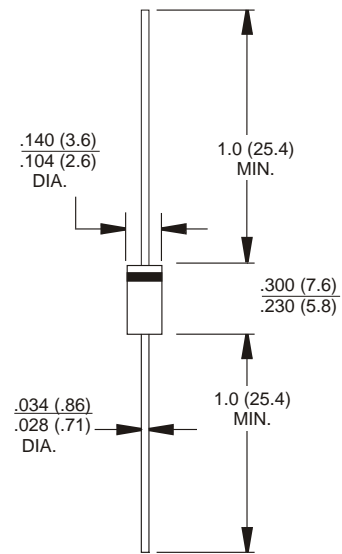
Features

- Ultrafast 50 Nanosecond Recovery Times
- 150°C Operating Junction Temperature
- Low Forward Voltage
- Low Leakage Current
- High Temperature Glass Passivated Junction
- These are Pb-Free Devices*
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

Mechanical Characteristics:

- Case: Epoxy, Molded
- Weight: 0.4 Gram (Approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal
- Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds
- Polarity: Cathode Indicated by Polarity Band

DO-15 Unit:inch(mm)



MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	VRRM	400	V
Working Peak Reverse Voltage	VRWM	—	V
DC Blocking Voltage	VR	—	V
Average Rectified Forward Current (Note 1)	IF(AV)	2.0	A
Non-Repetitive Peak Surge Current (Surge applied at rated load conditions, halfwave, single phase, 60 Hz)	IFSM	60	A
Operating Junction Temperature and Storage Temperature Range	TJ, Tstg	-55 to +150	°C

THERMAL CHARACTERISTICS

Characteristic	Symbol	Value	Unit
Maximum Thermal Resistance, Junction-to-Ambient	RθJA	65	°C/W

1. Pulse Test: Pulse Width = 300 μs, Duty Cycle ≤ 2.0%.
2. Leads maintained at ambient temperature at a distance of 9.5mm from the case.

DEVICE CHARACTERISTICS

MUR240

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Value	Unit
Maximum Instantaneous Forward Voltage (Note 2) (I _F = 2.0 A, T _J = 25°C) (I _F = 2.0 A, T _J = 150°C)	V _F	1.0 0.85	V
Maximum Instantaneous Reverse Current (Note 2) (Rated dc Voltage, T _J = 25°C) (Rated dc Voltage, T _J = 150°C)	I _R	5 150	μA
Maximum Reverse Recovery Time (I _F = 0.5 A, I _R = 1.0 A, I _{rr} = 0.25 A)	t _{rr}	50	ns
Maximum Forward Recovery Time (I _F = 1.0 A, di/dt = 100 A/μs)	t _{rr}	50	ns

2. Pulse Test: Pulse Width = 300 us, Duty Cycle ≤ 2.0%.

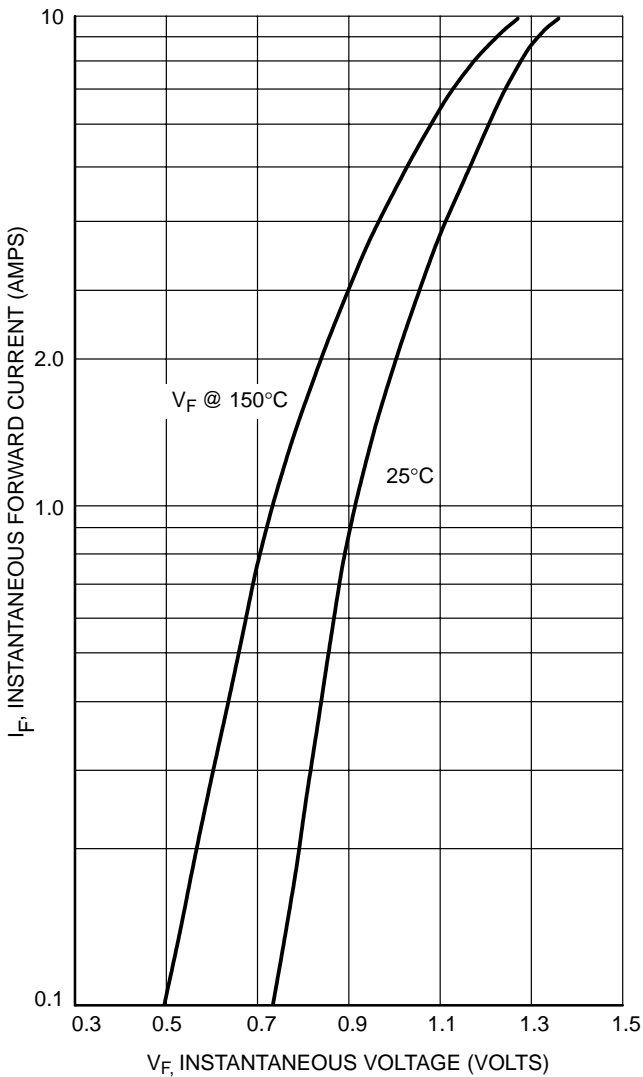


Figure 1. Typical Forward Voltage

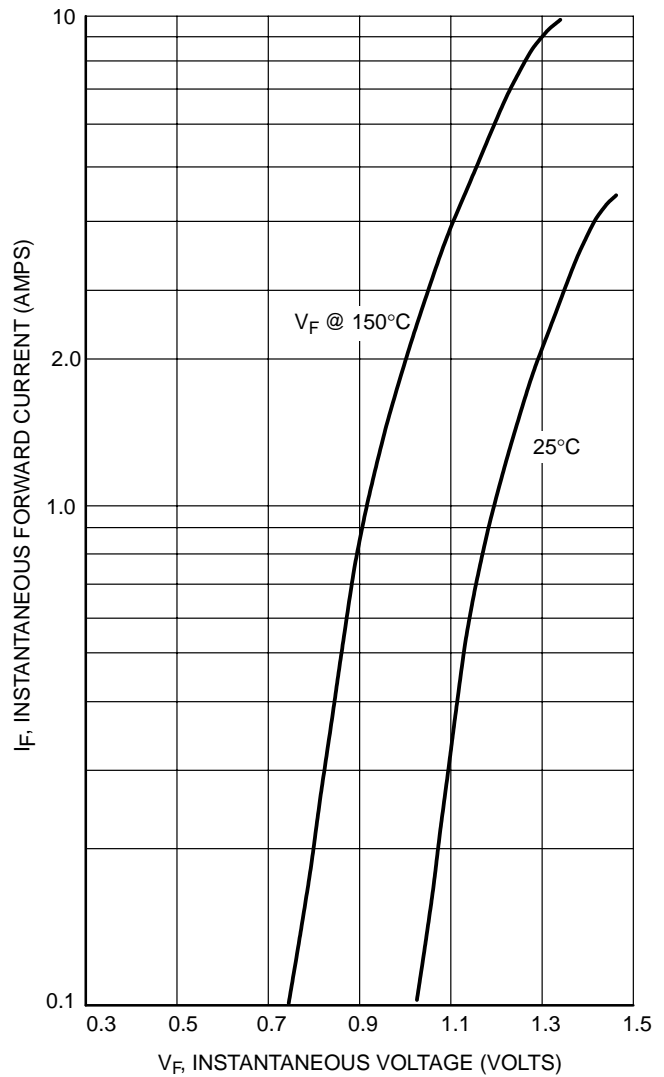


Figure 2. Maximum Forward Voltage

DEVICE CHARACTERISTICS

MUR240

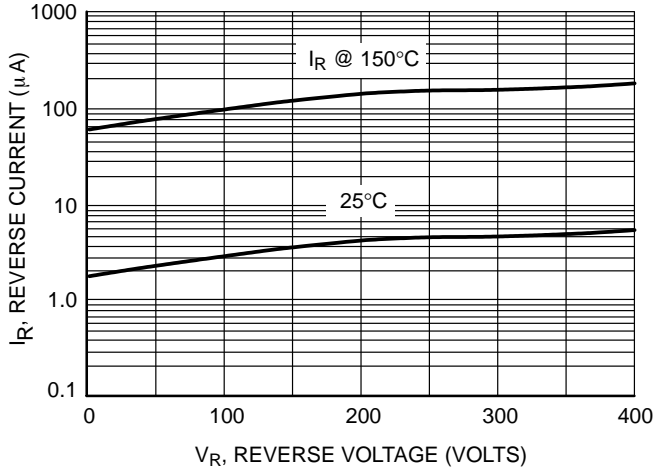


Figure 3. Maximum Reverse Current

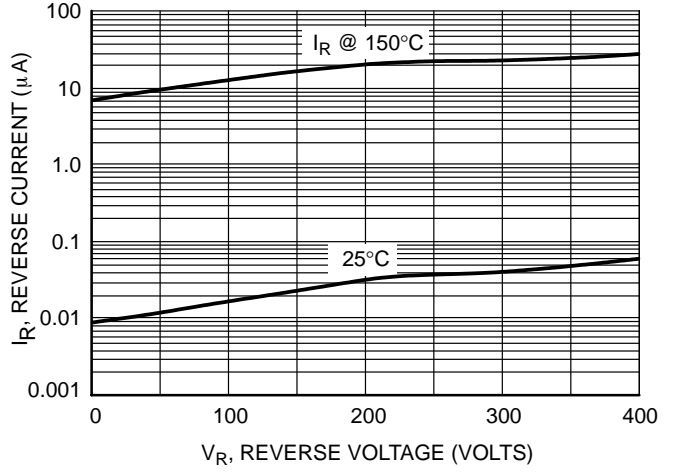


Figure 4. Typical Reverse Current

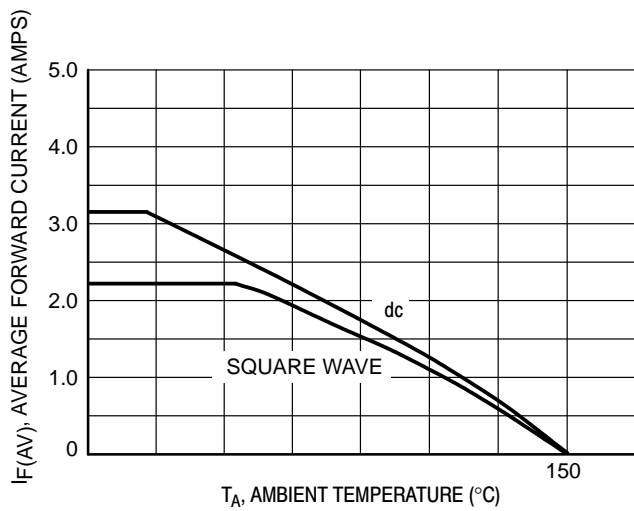


Figure 5. Current Derating

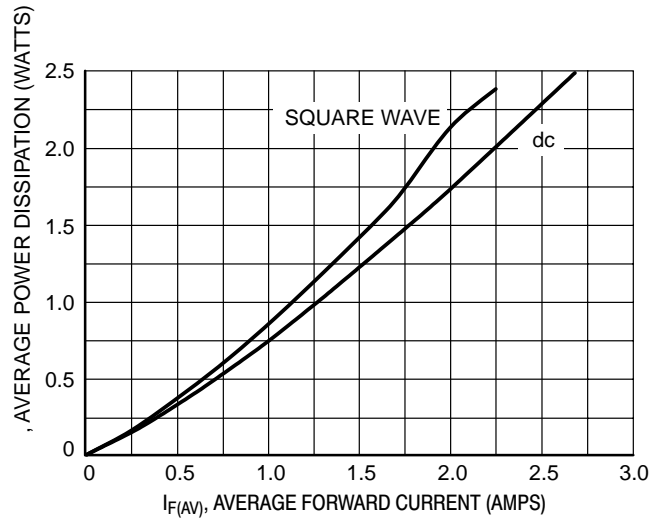


Figure 6. Power Dissipation

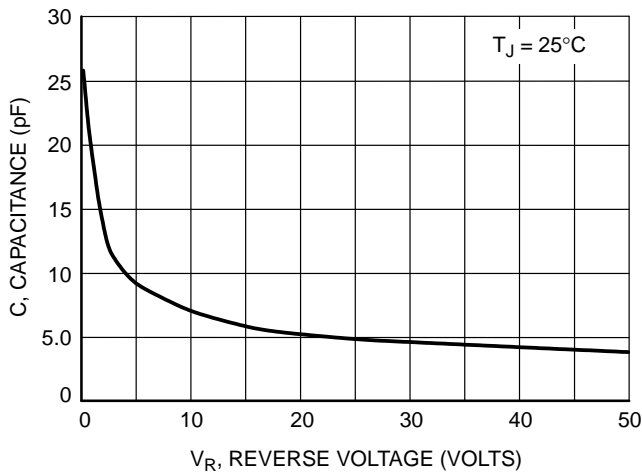


Figure 7. Typical Capacitance

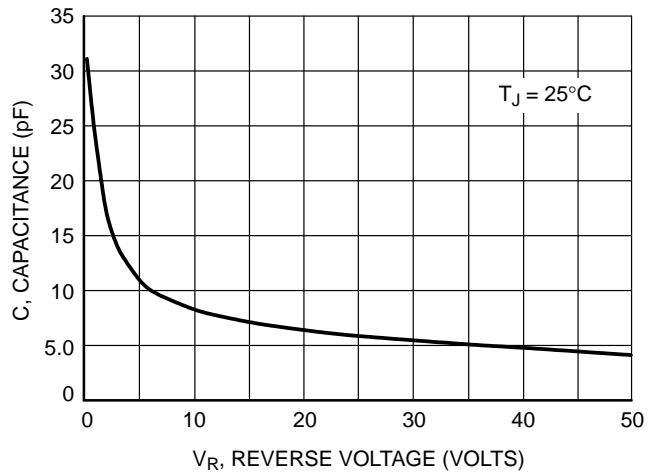


Figure 8. Maximum Capacitance