



YEA SHIN TECHNOLOGY CO., LTD

MUR220

ULTRA FAST RECOVERY RECTIFIER

VOLTAGE- 200 Volts CURRENT - 2.0 Amperes



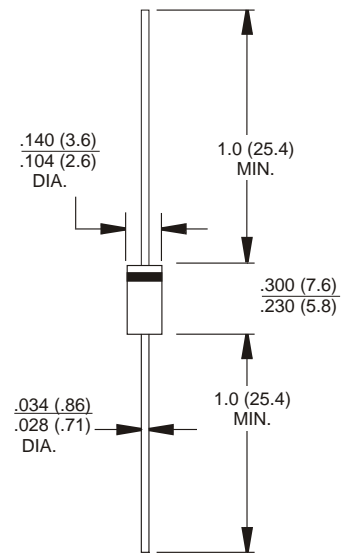
FEATURES

- Ultrafast 50 Nanosecond Recovery Times
- 150°C Operating Junction Temperature
- Low Forward Voltage
- Low Leakage Current
- High Temperature Glass Passivated Junction
- 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 and Mounting Surface Temperature for Soldering Purposes: 220°C Max. for 10 Seconds
- Polarity: Cathode Indicated by Polarity Band
- Marking: MUR220

DO-15 Unit:inch(mm)



MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	VRRM	200	Volts
Working Peak Reverse Voltage	VRWM	—	Volts
DC Blocking Voltage	VR	—	Volts
Average Rectified Forward Current (Note 1)	IF(AV)	2.0	Amps
Non-Repetitive Peak Surge Current (Surge applied at rated load conditions, halfwave, single phase, 60 Hz)	IFSM	60	Amps
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.

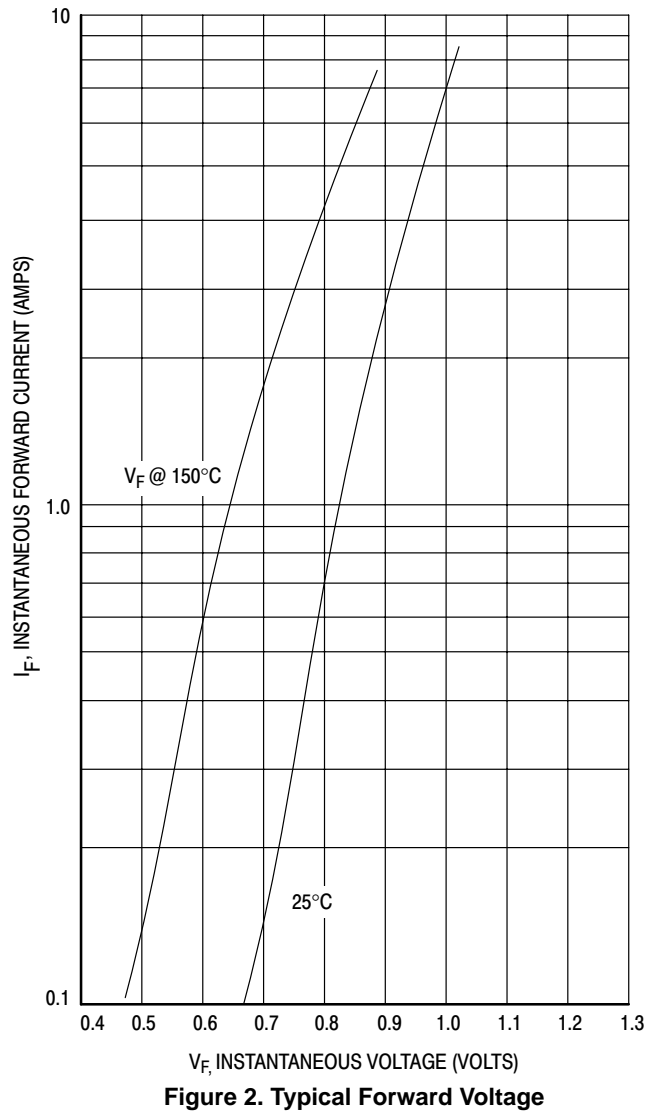
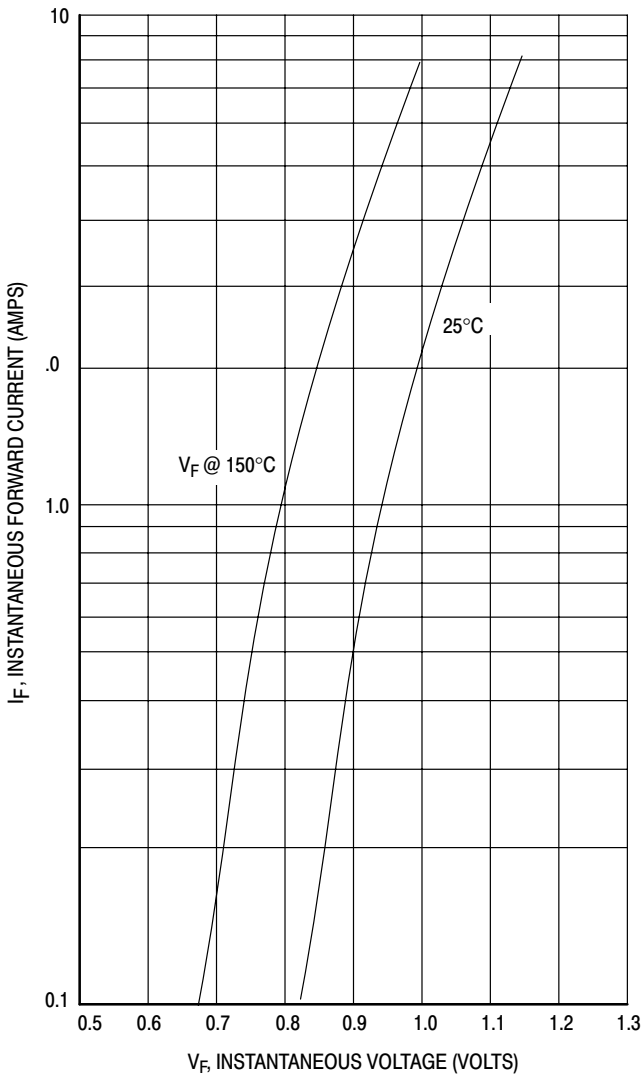
DEVICE CHARACTERISTICS

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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%.



DEVICE CHARACTERISTICS

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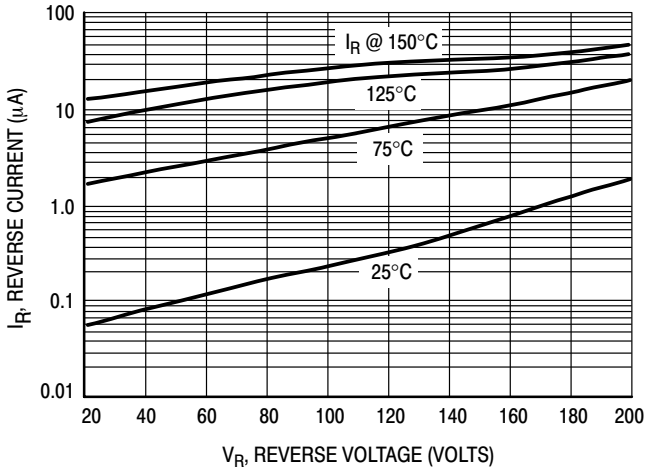


Figure 3. Maximum Reverse Current

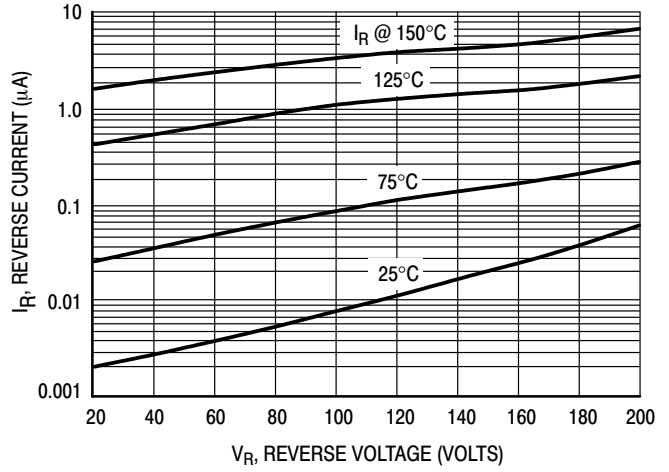


Figure 4. Typical Reverse Current

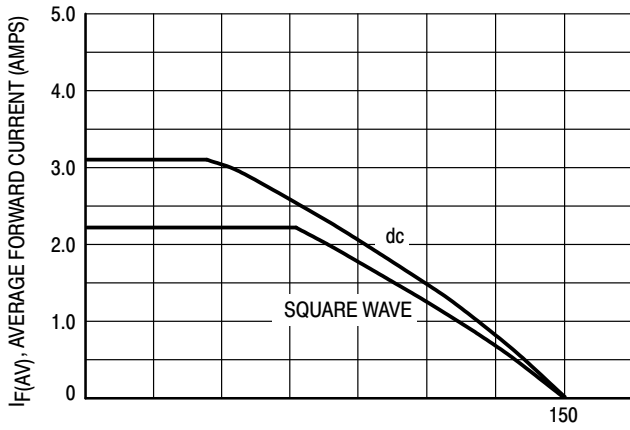


Figure 5. Current Derating

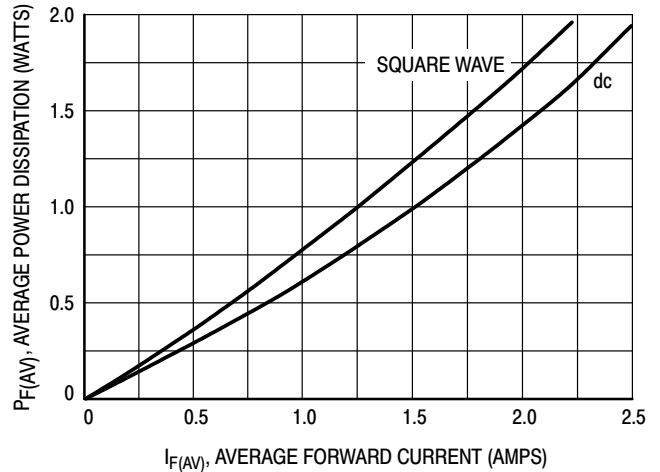


Figure 6. Power Dissipation

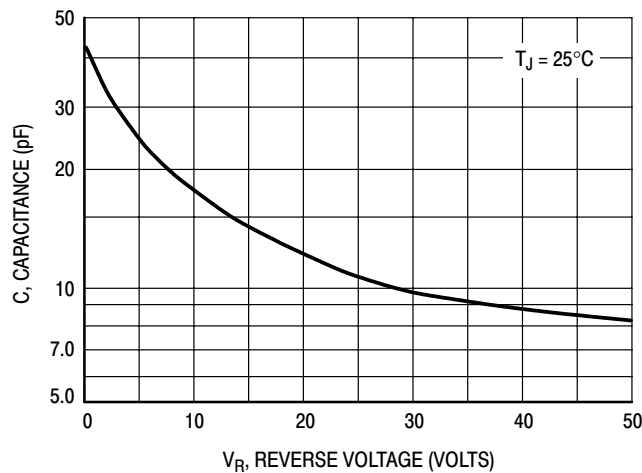


Figure 7. Typical Capacitance