

**SUPER-FAST RECOVERY RECTIFIERS**

<b>Features</b>	Ultrafast 35 Nanosecond Recovery Time	<b>Typical Reference Data</b>  <b>VRRM= 200V</b> <b>IF(AV)= 8A</b>  <b>VRRM= 400V</b> <b>IF(AV)= 8A</b>  <b>VRRM= 600V</b> <b>IF(AV)=8A</b>
	175° C Operating Junction Temperature	
	Popular TO-220AC Package	
	Epoxy Meets UL94 ,V0 @ 1/8"	
	High Temperature Glass Passivated Junction	
	Low Forward Voltage	
	Low Leakage Current	
Reverse Voltage to 600 Volts		
Pb-Free Packages are Available		

<b>Mechanical Characteristics</b>	Case: Epoxy, Molded
	Weight: 1.9 grams (approximately)
	Finish: All External Surfaces Corrosion Resistant and Terminal
	Leads are Readily Solderable
	Lead Temperature for Soldering Purposes: 260° C Max. for 10 Seconds
	Shipped 50 units per plastic tube

**MAXIMUM RATINGS**

Rating	Symbol	MUR820AC	MUR840AC	MUR860AC	Unit
Peak Repetitive Reverse Voltage	VRRM	200	400	600	V
Working Peak Reverse Voltage	VRRM				
DC Blocking Voltage	VR				
Average Rectified Forward Current Total Device, (Rated VR), TC = 150	IF(AV)	8			A
Peak Repetitive Forward Current (Rated VR, Square Wave, 20 kHz), TC = 150	IRM	16			A
Nonrepetitive Peak Surge Current (Surge applied at rated load conditions halfwave, single phase, 60	IFSM	100			A
Operating Junction Temperature and Storage Tempera	TJ, Tstg	- 40 to +175			

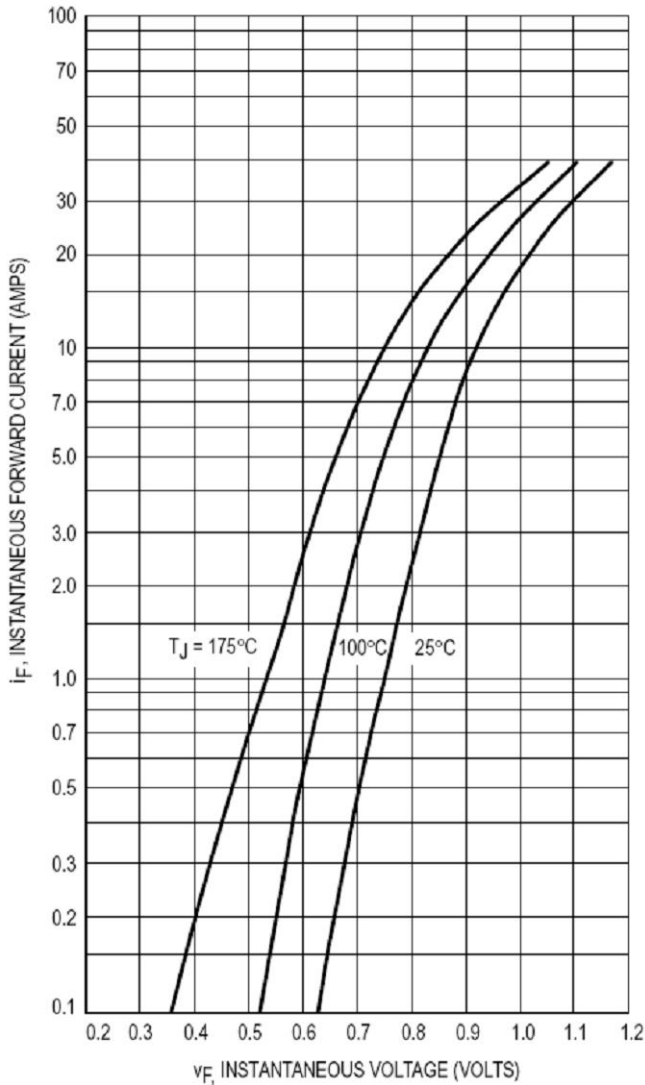
**THERMAL CHARACTERISTICS( Per Diode Leg)**

Maximum Thermal Resistance, Junction to Case	R <sub>JC</sub>	3.0	2.0	MW
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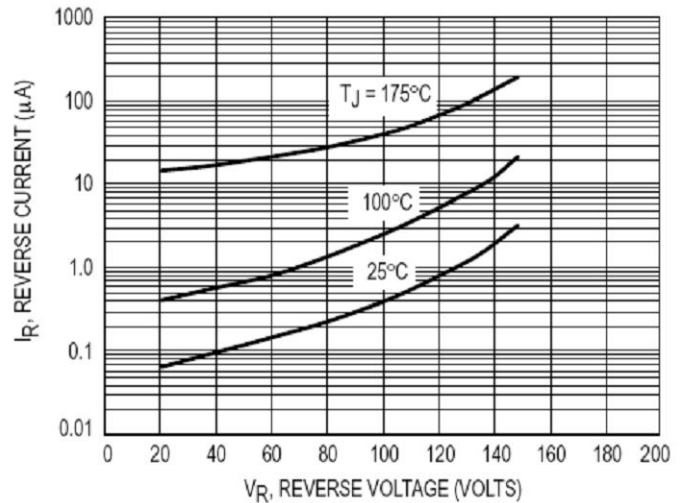
**ELECTRICAL CHARACTERISTICS(Per Diode Leg)**

Maximum Instantaneous Forward Voltage (1) (IF = 8.0 Amps, TC = 25° C)	VF	1.05	1.35	1.5	V
Maximum Instantaneous Reverse Current (1) (Rated dc Voltage, TJ = 150° C)	IR	800	800	800	μ A
(Rated dc Voltage, TJ = 25° C)		10	10	10	
Maximum Reverse Recovery Time (IF = 0.5 A, IR = 1.0 A, IREC = 0.25 A)	Trr	35			ns

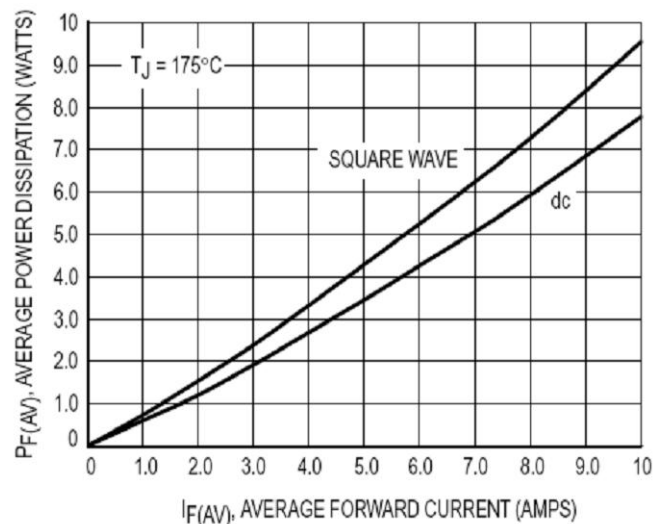
(1) Pulse Test: Pulse Width = 300μ s, Duty Cycle 2.0%.



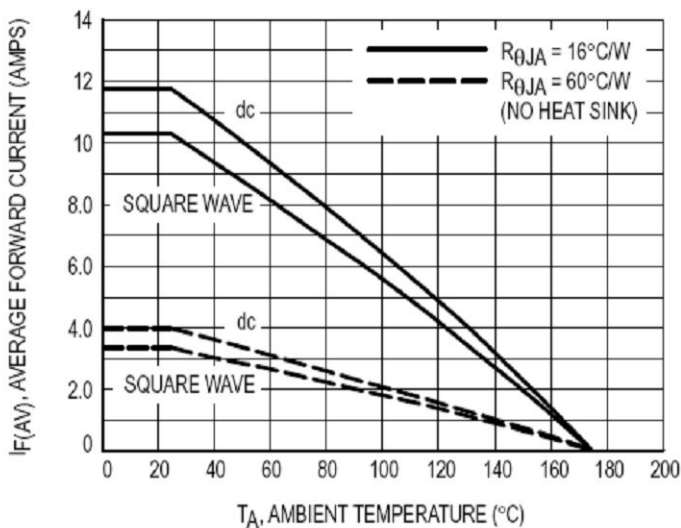
**Figure 1. Typical Forward Voltage**



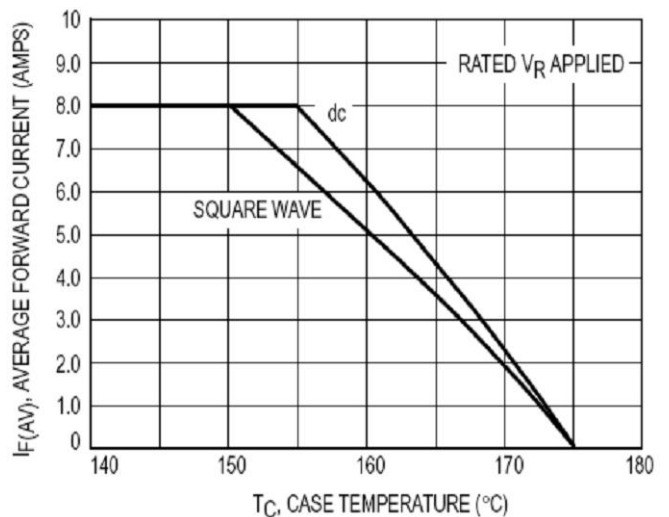
**Figure 2. Typical Reverse Current**



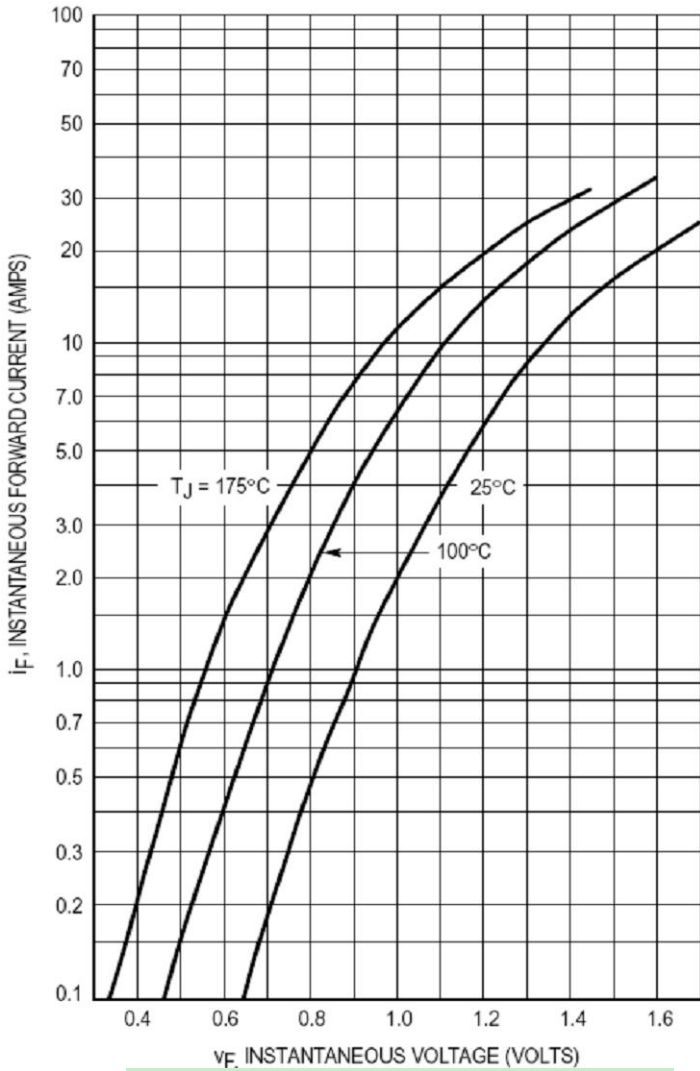
**Figure 3 Current Derating, Case**



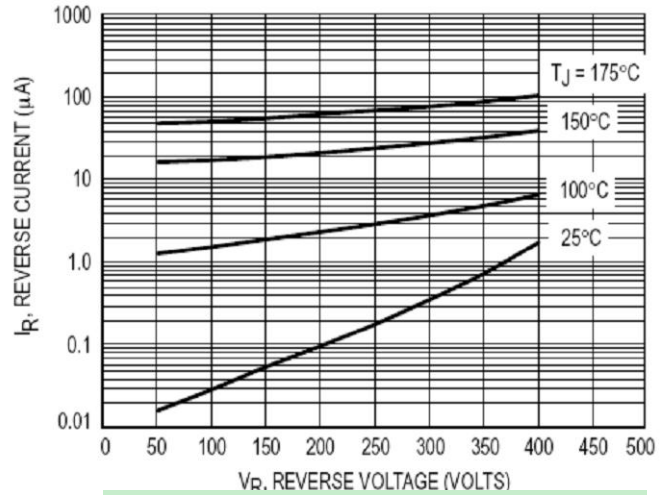
**Figure 4 Current Derating, Ambient**



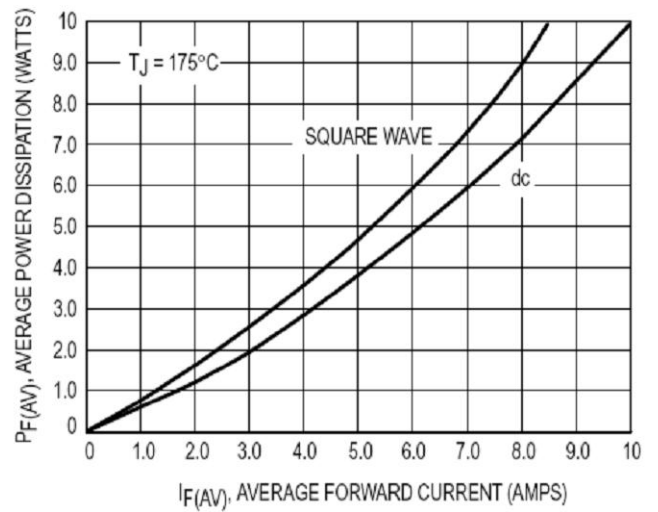
**Figure 5 Power Dissipation**



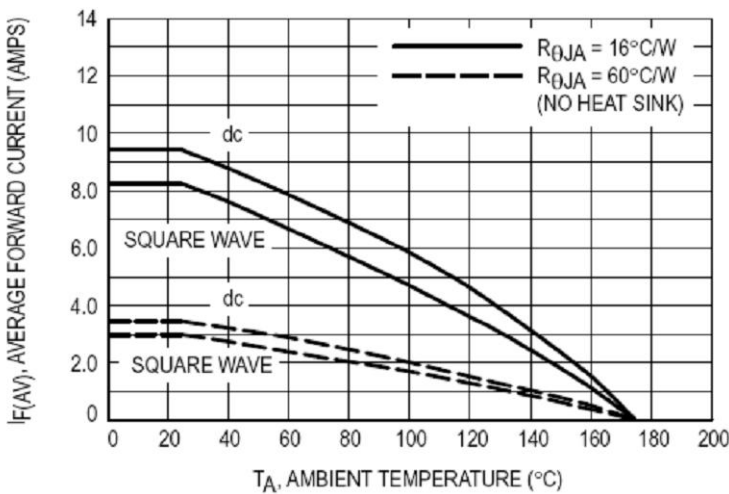
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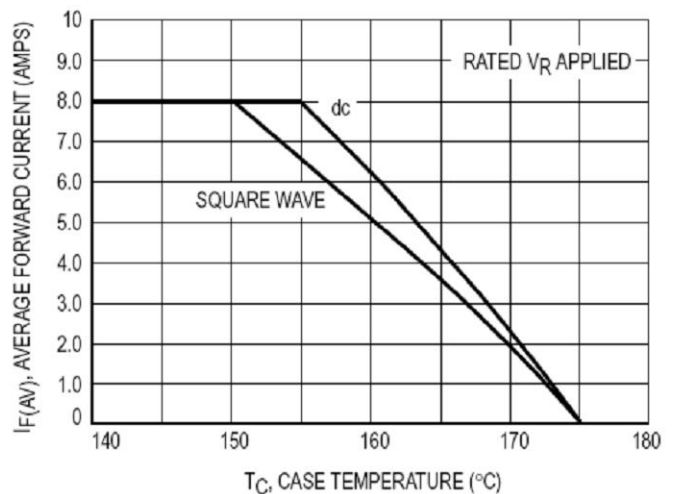
**Figure 2. Typical Reverse Current**



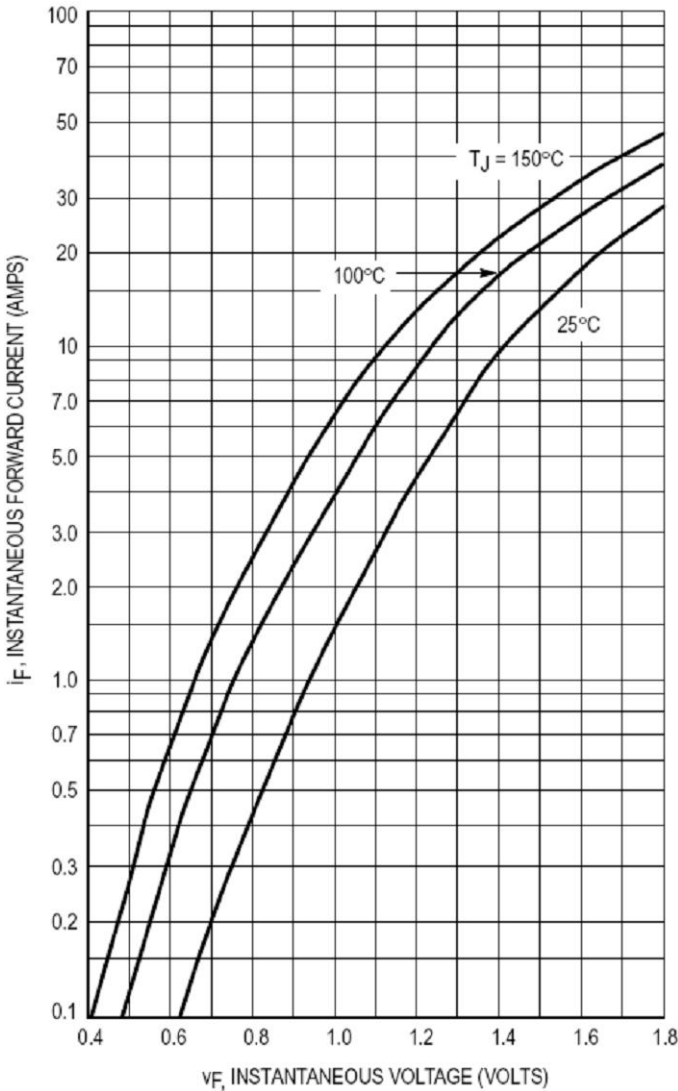
**Figure 3. Current Derating, Case**



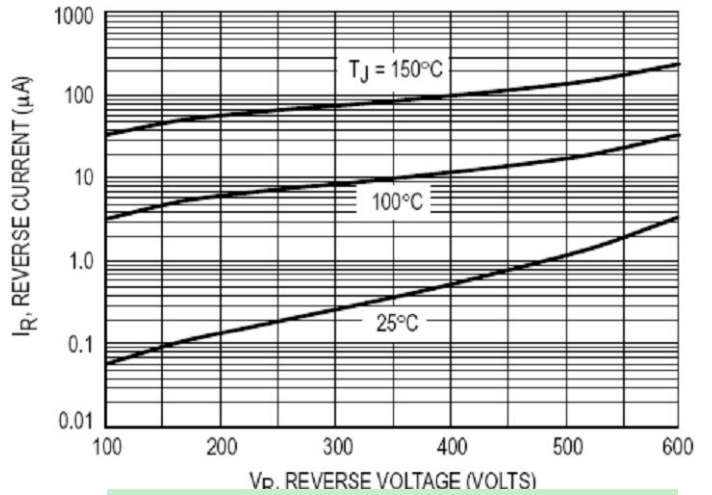
**Figure 4. Current Derating, Ambient**



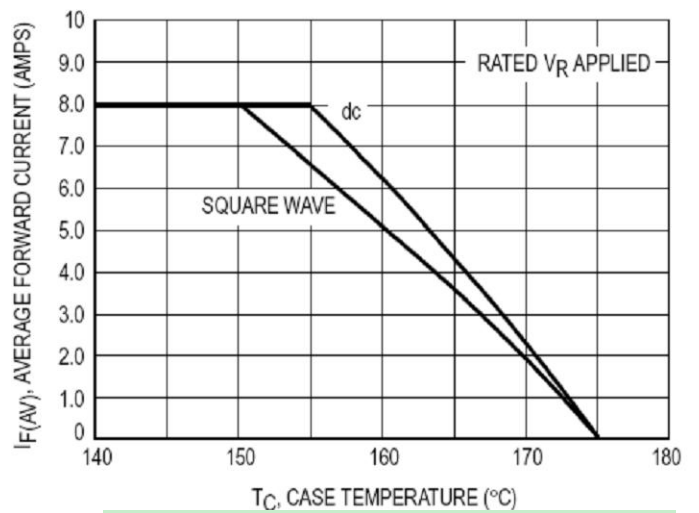
**Figure 5. Power Dissipation**



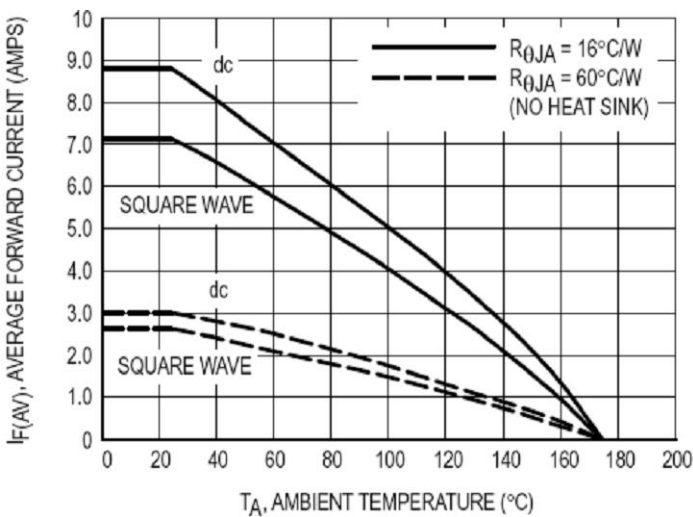
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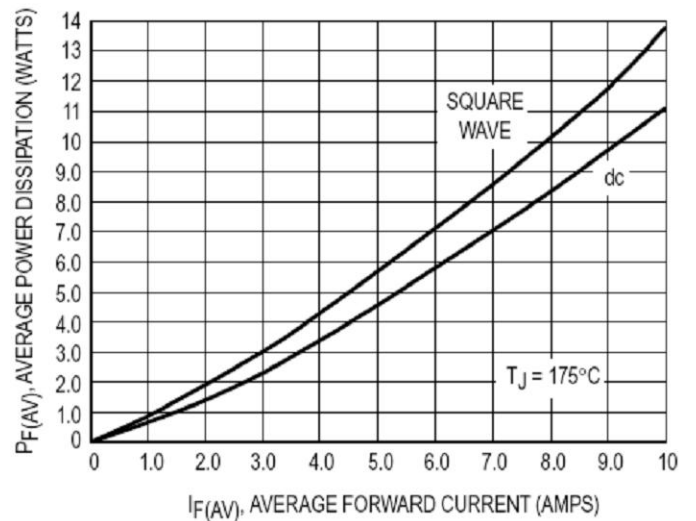
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**Figure 4. Current Derating, Ambient**



**Figure 5. Power Dissipation**

