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- MUR105**
- MUR110**
- MUR115**
- MUR120**
- MUR130**
- MUR140**
- MUR150**
- MUR160**
- MUR170**
- MUR180**
- MUR190**
- MUR1100**

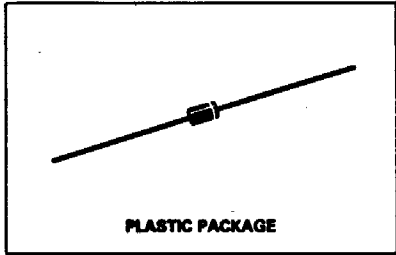
**SWITCHMODE POWER RECTIFIERS**

... designed for use in switching power supplies, inverters and as free wheeling diodes, these state-of-the-art devices have the following features:

- Ultrafast 25, 50 and 75 Nanosecond Recovery Times
- 175°C Operating Junction Temperature
- Low Forward Voltage
- Low Leakage Current
- High Temperature Glass Passivated Junction
- Reverse Voltage to 1000 Volts

**ULTRAFAST  
 RECTIFIERS**

**1.0 AMPERE  
 50-1000 VOLTS**



**MAXIMUM RATINGS**

Rating	Symbol	MUR										Unit		
		105	110	115	120	130	140	150	160	170	180		190	1100
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	150	200	300	400	500	600	700	800	900	1000	Volts
Average Rectified Forward Current (Square Wave Mounting Method #3 Per Note 1)	I <sub>F(AV)</sub>	1.0 @ T <sub>A</sub> = 130°C			1.0 @ T <sub>A</sub> = 120°C				1.0 @ T <sub>A</sub> = 95°C				Amps	
Nonrepetitive Peak Surge Current (Surge applied at rated load conditions, halfwave, single phase, 60 Hz)	I <sub>FSM</sub>	35										Amps		
Operating Junction Temperature and Storage Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +175										°C		

**THERMAL CHARACTERISTICS**

Maximum Thermal Resistance, Junction to Ambient	R <sub>θJA</sub>	See Note 1	°C/W
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**ELECTRICAL CHARACTERISTICS**

Maximum Instantaneous Forward Voltage (1) (I <sub>F</sub> = 1.0 Amp, T <sub>J</sub> = 150°C) (I <sub>F</sub> = 1.0 Amp, T <sub>J</sub> = 25°C)	V <sub>F</sub>	0.710 0.875	1.05 1.25	1.50 1.75	Volts
Maximum Instantaneous Reverse Current (1) (Rated dc Voltage, T <sub>J</sub> = 150°C) (Rated dc Voltage, T <sub>J</sub> = 25°C)	I <sub>R</sub>	50 2.0	150 5.0	600 10	µA
Maximum Reverse Recovery Time (I <sub>F</sub> = 1.0 Amp, di/dt = 50 Amp/µs) (I <sub>F</sub> = 0.5 Amp, I <sub>R</sub> = 1.0 Amp, I <sub>REC</sub> = 0.25 A)	t <sub>rr</sub>	35 25	75 50	100 75	ns
Maximum Forward Recovery Time (I <sub>F</sub> = 1.0 A, di/dt = 100 A/µs, I <sub>REC</sub> to 1.0 V)	t <sub>fr</sub>	25	50	75	ns