

Glass Passivated Junction Rectifiers Reverse Voltage 50 to 1000 Volts Forward Current 1.0 Ampere

## **Features**

- ◆ Low forward voltage drop
- High current capability
- High reliability
- ◆ High surge current capability
- ◆ 3mm miniature body

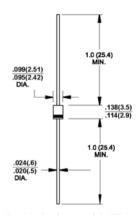


R-1

## **Mechanical Data**

- ◆ Case: Molded plastic R-1
- ◆ Epoxy: UL 94V-O rate flame retardant
- ◆ Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- ◆ Polarity: Color band denotes cathode end
- High temperature soldering guaranteed: 250°C/10 seconds .375" (9.5mm) lead lengths at 5 lbs.. (2.3kg) tension
- ◆ Weight: 0.007 ounce, 0.20 gram

For capacitive load, derate current by 20%



Dimensions in inches and (millimeters)

## **Maximum Ratings and Electrical Characteristics**

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.

Parameter	Symbols	1G1	1G2	1G3	1G4	1G5	1G6	1G7	Units
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length @T <sub>A</sub> =75°C	I <sub>(AV)</sub>	1.0							Amp
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30.0							Amps
Maximum instantaneous forward voltage @ 1.0A	V <sub>F</sub>	1.1							Volts
	I <sub>R</sub>	5.0 100							uА
Typical junction capacitance (Note 1)	C <sub>J</sub>	15							pF
Operating temperature range	T,	-55 to +150							∘C
Storage temperature range	T <sub>STG</sub>	-55 to +150							°C

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

## **RATINGS AND CHARACTERISTIC CURVES**

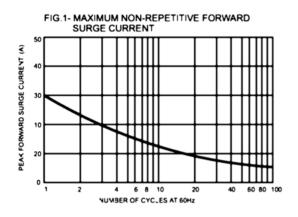


FIG.2- MAXIMUM FORWARD CURRENT DERATING
CURVE

1 50

25

0 25

50

75

100

125

150

175

AMBIENT TEMPERATURE (°C)

FIG.3- TYPICAL JUNCTION CAPACITANCE

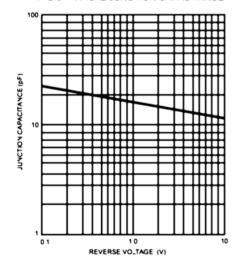


FIG.4- TYPICAL FORWARD CHARACTERISTICS

