## 1F1G THRU 1F7G

# FAST RECOVERY GLASS PASSIVATED JUNCTION RECTIFIER

VOLTAGE: 50 TO 1000V CURRENT: 1.0A



# Molded case feature for auto insertion High current capability Low leakage current High surge capability High temperature soldering guaranteed 250°C /10sec/0.375" lead length at 5 lbs tension Glass Passivated chip

### **MECHANICAL DATA**

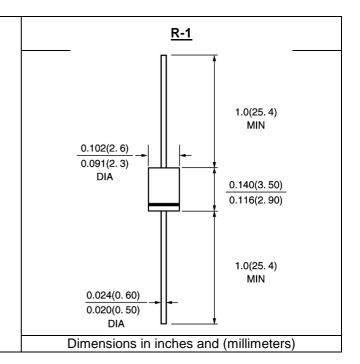
Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C

Case: Molded with UL-94 Class V-0 recognized Flame

Retardant Epoxy

Polarity: color band denotes cathode

Mounting position: any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25℃, unless otherwise stated, for capacitive load, derate current by 20%)

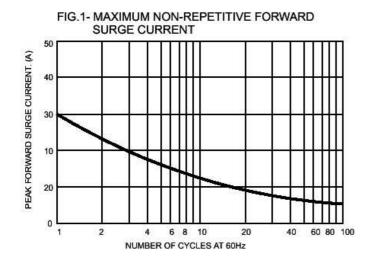
	SYMBOL	1F	1F	1F	1F	1F	1F	1F	units
	OTIVIDOL	1G	2G	3G	4G	5G	6G	7G	uiilo
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8" lead length at Ta =50℃	If(av)	1.0							А
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	Ifsm	30.0							Α
Maximum Instantaneous Forward Voltage at rated forward current	Vf	1.3							٧
Maximum full load reverse current full cycle at $T_L = 75$ °C	Ir(av)	30.0							μA
Maximum DC Reverse Current Ta =25℃	lr	5.0							μA
at rated DC blocking voltage Ta =100℃		100.0							μΑ
Typical Junction Capacitance (Note 1)	Cj	15.0							pF
Maximum Reverse Recovery Time (Note 2)	Trr		15	50		250	50	00	nS
Operating Temperature (Note 3)	R(ja)	50.0							€\M
Storage and Operation Junction Temperature	Tstg, Tj	-55 to +150							${\mathcal C}$

### Note:

- 1. Measured at 1.0 MHz and applied voltage of 4.0Vdc
- 2. Test Condition If =0.5A, Ir =1.0A, Irr =0.25A
- 3. Thermal Resistance from Junction to Ambient at 0.375" lead length, P.C. Board Mounted

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### **RATINGS AND CHARACTERISTIC CURVES 1F1G THRU 1F7G**



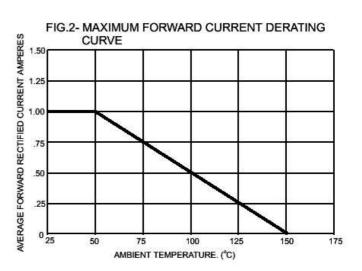
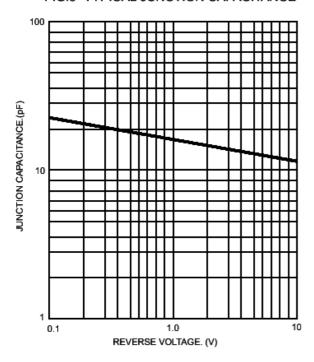
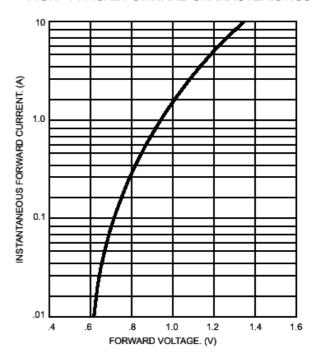


FIG.3- TYPICAL JUNCTION CAPACITANCE







<sup>1</sup> Rev.4 www.gulfsemi.com