

# 1G1 ~ 1G7

**PRV : 50 - 1000 Volts**

**Io : 1.0 Ampere**

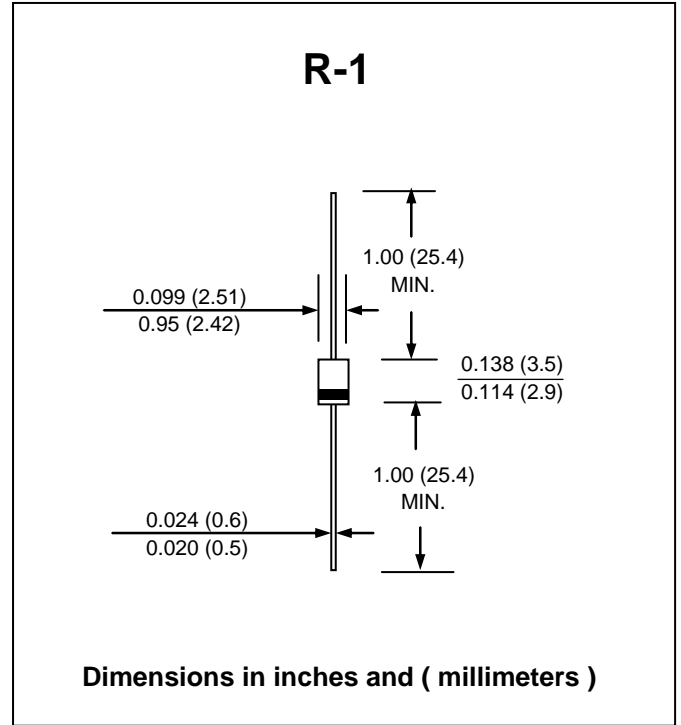
**FEATURES :**

- \* Glass passivated chip
- \* High current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Pb / RoHS Free

**MECHANICAL DATA :**

- \* Case : Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.20 gram

## GLASS PASSIVATED JUNCTION SILICON RECTIFIERS



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

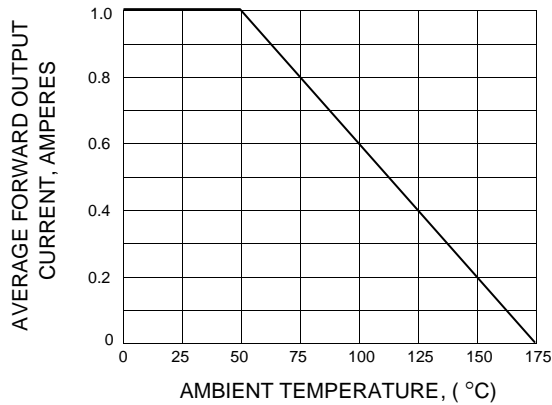
Rating at 25 °C ambient temperature unless otherwise specific.  
 Single phase, half wave, 60 Hz, resistive or inductive load  
 For capacitive load, derate current by 20%

RATING	SYMBOL	1G1	1G2	1G3	1G4	1G5	1G6	1G7	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 50 °C	I <sub>F(AV)</sub>	1.0							A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30							A
Maximum Forward Voltage at I <sub>F</sub> = 1.0 A.	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current Ta = 25 °C at rated DC Blocking Voltage Ta = 125 °C	I <sub>R</sub>	5.0							μA
	I <sub>R(H)</sub>	100							μA
Typical Junction Capacitance (Note1)	C <sub>J</sub>	15							pF
Junction Temperature Range	T <sub>J</sub>	- 65 to + 150							°C
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 150							°C

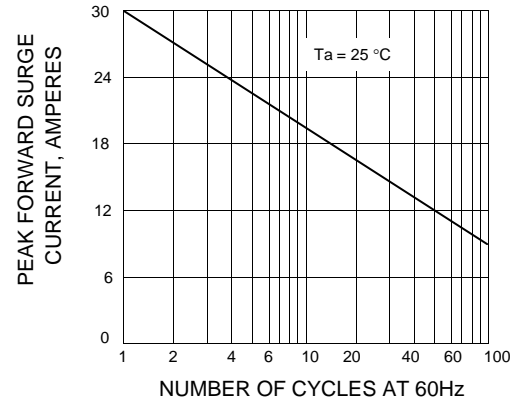
**Note :** (1) Measured at 1.0 MHz and applied reverse voltage of 4.0VDC

**RATING AND CHARACTERISTIC CURVES ( 1G1 - 1G7 )**

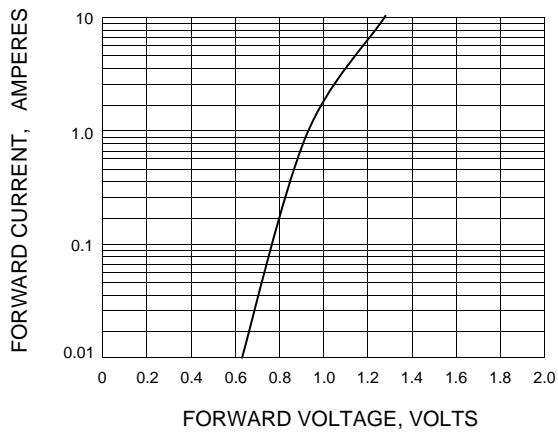
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

