

# GPP20A THRU GPP20M

## Glass Passivated Junction Rectifiers

VOLTAGE: 50 TO 1000V

CURRENT: 2.0A



### FEATURE

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated junction
- Capable of meeting environmental standards of MIL-S-19500
- 2.0 Ampere operation at  $T_A=55^{\circ}\text{C}$  with no thermal runaway
- Typical  $I_r$  less than 0.1 A

### MECHANICAL DATA

Case: JEDEC DO-204AC, molded plastic over glass passivated chip

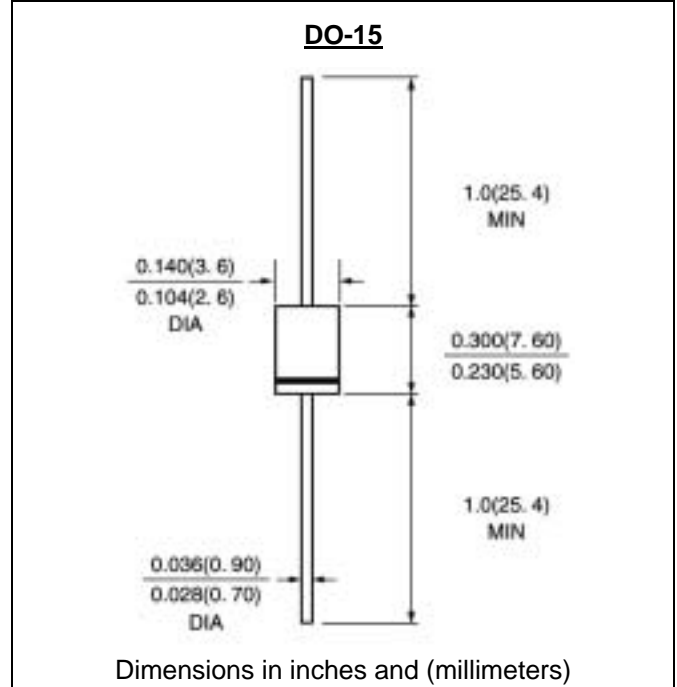
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

High temperature soldering guaranteed:  $250^{\circ}\text{C}/10$  seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.015 oz., 0.4 g



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

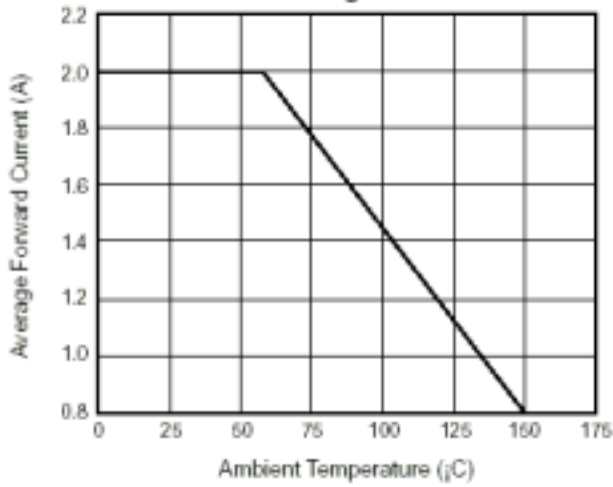
(single-phase, half-wave, 60HZ, resistive or inductive load rating at  $25^{\circ}\text{C}$ , unless otherwise stated, for capacitive load, derate current by 20%)

	SYMBOL	GPP 20A	GPP 20B	GPP 20D	GPP 20G	GPP 20J	GPP 20K	GPP 20M	units
Maximum Recurrent Peak Reverse Voltage	$V_{rrm}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{rms}$	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	$V_{dc}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8" lead length at $T_a = 55^{\circ}\text{C}$	$I_f(av)$	2.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	$I_{fsm}$	70.0							A
Maximum Instantaneous Forward Voltage at 2.0A	$V_f$	1.1							V
Maximum DC Reverse Current $T_a = 25^{\circ}$ Cat rated DC blocking voltage	$I_r$	5.0							$\mu\text{A}$
Typical Junction Capacitance (Note 1)	$C_j$	25.0							PF
Typical Thermal Resistance (Note 2)	$R(ja)$	25.0 20.0							$^{\circ}\text{C}/\text{W}$
Storage and Operating Junction Temperature	$T_{stg}, T_j$	-55 to +150							$^{\circ}\text{C}$

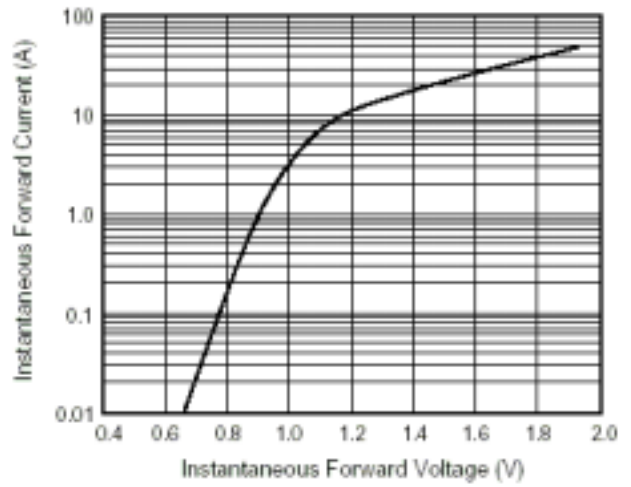
Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted

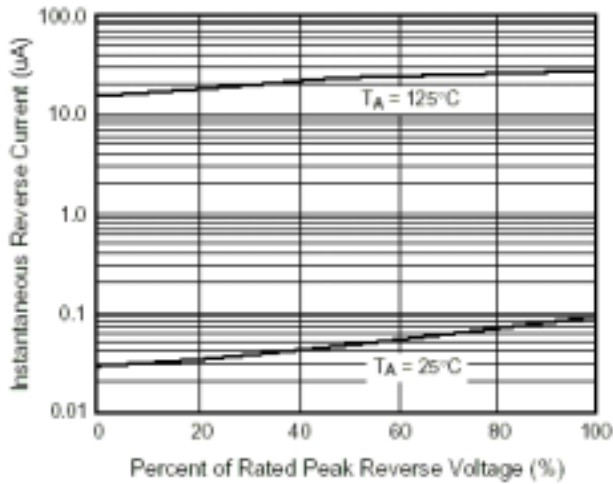
**Fig. 1 – Forward Current Derating Curve**



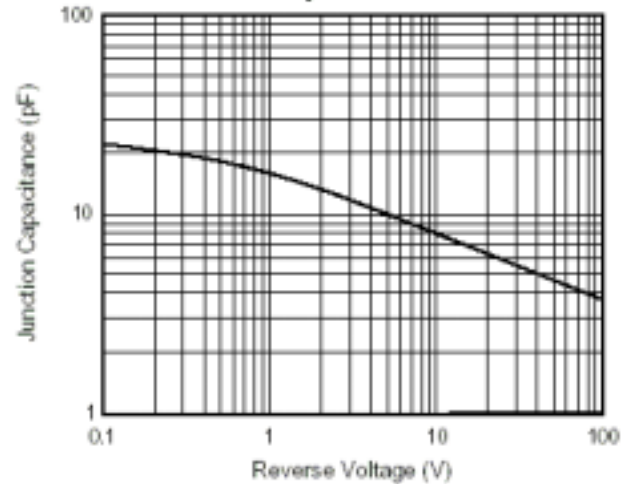
**Fig. 2 – Typical Instantaneous Forward Characteristics**



**Fig. 3 – Typical Reverse Characteristics**



**Fig. 4 – Typical Junction Capacitance**



**Fig.5 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**

