

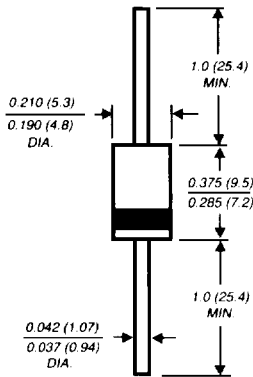
GP20A THRU GP20J

GLASS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage - 50 to 600 Volts Forward Current - 2.0 Amperes

PATENTED *

Case Style GP20



Dimensions in inches and (millimeters)

* Glass-plastic encapsulation technique is covered by Patent No. 3,996,602 and brazed-lead assembly by Patent No. 3,930,306



FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ High temperature metallurgically bonded construction
- ◆ Glass passivated cavity-free 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 $0.1\mu\text{A}$
- ◆ High temperature soldering guaranteed: $350^\circ\text{C}/10$ seconds $0.375"$ (9.5mm) lead length, 5 lbs.(2.3kg) tension

MECHANICAL DATA

Case: Molded plastic over glass body

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

Polarity: Band denotes cathode end

Mounting Position: Any

Weight: 0.03 ounce, 0.8 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 C ambient temperature unless otherwise specified

	SYMBOLS	GP 20A	GP 20B	GP 20D	GP 20G	GP 20J	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=55^\circ\text{C}$	$I_{(AV)}$	2.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	65.0					Amps
Maximum instantaneous forward voltage at 2.0A	V_F	1.2		1.1			Volts
Maximum reverse current at rated DC blocking voltage	I_R	5.0					μA
Maximum full load reverse current, full cycle average 0.375" (9.5mm) lead length at $T_A=55^\circ\text{C}$	$I_{R(AV)}$	100.0					μA
Typical reverse recovery time (NOTE 1)	t_{rr}	2.5					μs
Typical junction capacitance (NOTE 2)	C_J	40.0					pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$ $R_{\theta JL}$	25.0 10.0					$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175					$^\circ\text{C}$

NOTES:

(1) Reverse recovery test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(3) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES GP20A THRU GP20J

