

GP10Y

SINTERED GLASS JUNCTION PLASTIC RECTIFIER

VOLTAGE:1600V

CURRENT: 1.0A



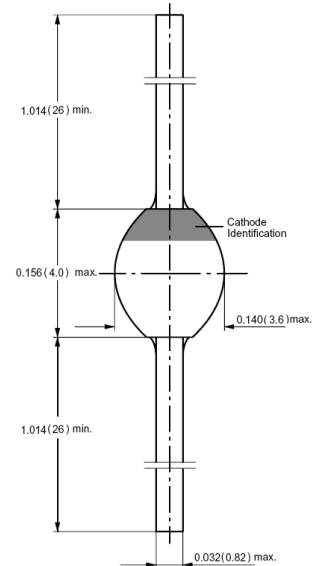
FEATURE

High temperature metallurgically bonded construction
Sintered glass cavity free junction
Capability of meeting environmental standard of MIL-S-19500
High temperature soldering guaranteed
350°C /10sec/0.375"lead length at 5 lbs tension
Operate at $T_a = 55^\circ\text{C}$ with no thermal run away
Typical $I_r < 0.1\mu\text{A}$

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

SOD-57



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

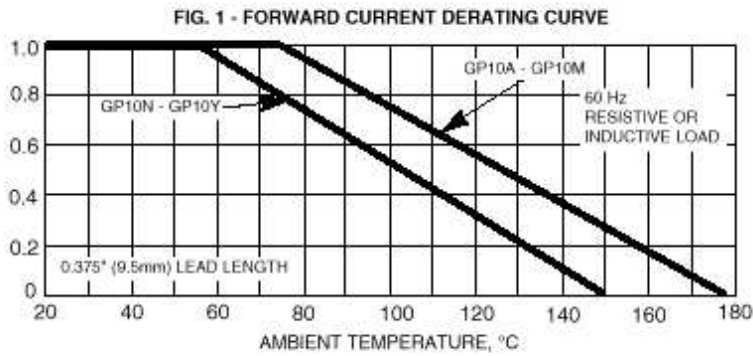
	SYMBOL	GP10Y	units
Maximum Recurrent Peak Reverse Voltage	V_{rrm}	1600	V
Maximum RMS Voltage	V_{rms}	1120	V
Maximum DC blocking Voltage	V_{dc}	1600	V
Maximum Average Forward Rectified Current 3/8"lead length at $T_a = 75^\circ\text{C}$	$I_f(av)$	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{fsm}	30.0	A
Maximum Instantaneous Forward Voltage at 1.0A	V_f	1.3	V
Maximum full load reverse current full cycle Average at 75°C	$I_r(av)$	30.0	μA
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at rated DC blocking voltage $T_a = 125^\circ\text{C}$	I_r	5.0 50.0	μA μA
Typical Reverse Recovery Time (Note 1)	T_{rr}	2.0	μs
Typical Junction Capacitance (Note 2)	C_j	5.0	PF
Typical Thermal Resistance (Note 3)	$R(ja)$	55.0	$^\circ\text{C}/W$
Storage and Operating Junction Temperature	T_{stg}, T_j	-65 to +175	$^\circ\text{C}$

Note:

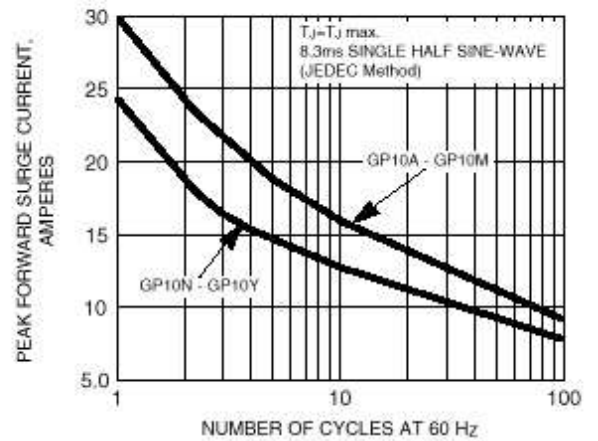
1. Reverse Recovery Condition $I_f = 0.5\text{A}$, $I_r = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES GP10Y

AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

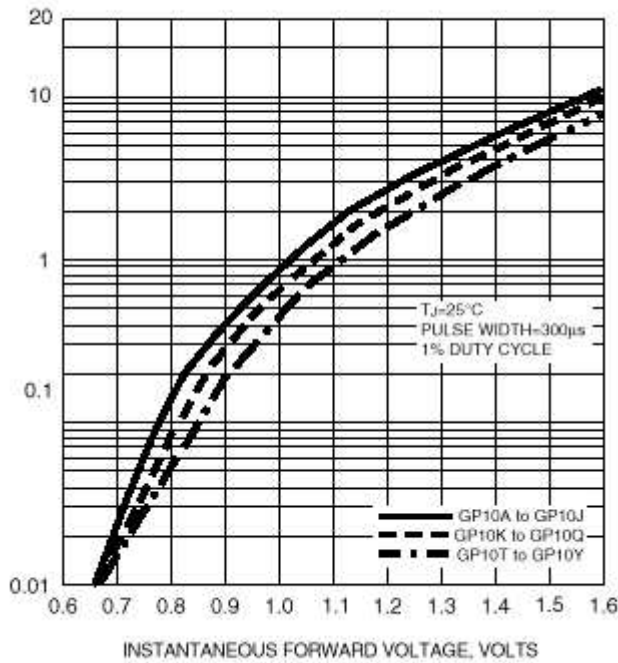


**FIG. 2 - MAXIMUM NON-REPETITIVE
PEAK FORWARD SURGE CURRENT**



**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD
CHARACTERISTICS**

INSTANTANEOUS FORWARD CURRENT, AMPERES



**FIG. 4 - TYPICAL REVERSE
CHARACTERISTICS**

