

GP10Y

SINTERED GLASS JUNCTION PLASTIC RECTIFIER

VOLTAGE:1600V

CURRENT: 1.0A



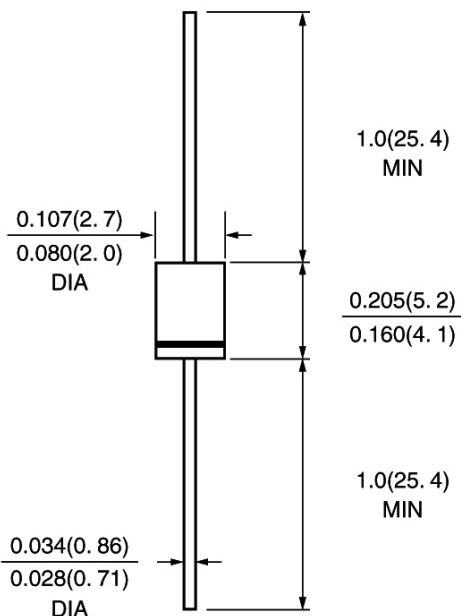
FEATURE

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 Ta =55°C with no thermal run away
Typical Ir<0.1μA

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

DO-41\DO-204AL



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	Vrrm	1600	V
Maximum RMS Voltage	Vrms	1120	V
Maximum DC blocking Voltage	Vdc	1600	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =75°C	If(av)	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	30.0	A
Maximum Instantaneous Forward Voltage at 1.0A	Vf	1.3	V
Maximum full load reverse current full cycle Average at 75°C	Ir(av)	30.0	μA
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	5.0 50.0	μA μA
Typical Reverse Recovery Time (Note 1)	Trr	2.0	μS
Typical Junction Capacitance (Note 2)	Cj	5.0	PF
Typical Thermal Resistance (Note 3)	R(ja)	55.0	°C/W
Storage and Operating Junction Temperature	Tstg, Tj	-65 to +175	°C

Note:

1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
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

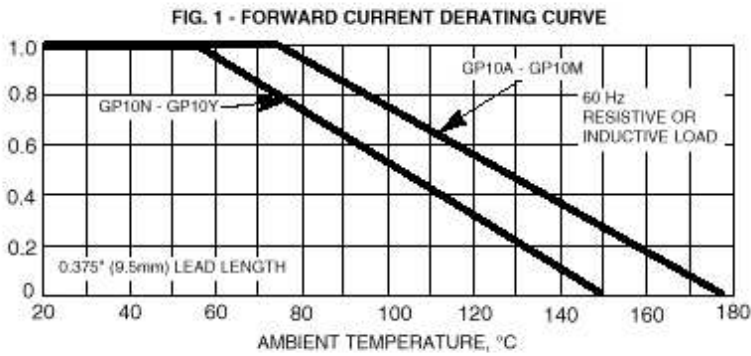
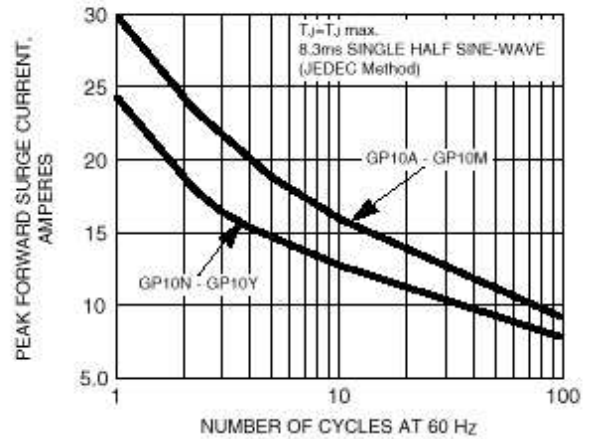


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



INSTANTANEOUS FORWARD CURRENT, AMPERES

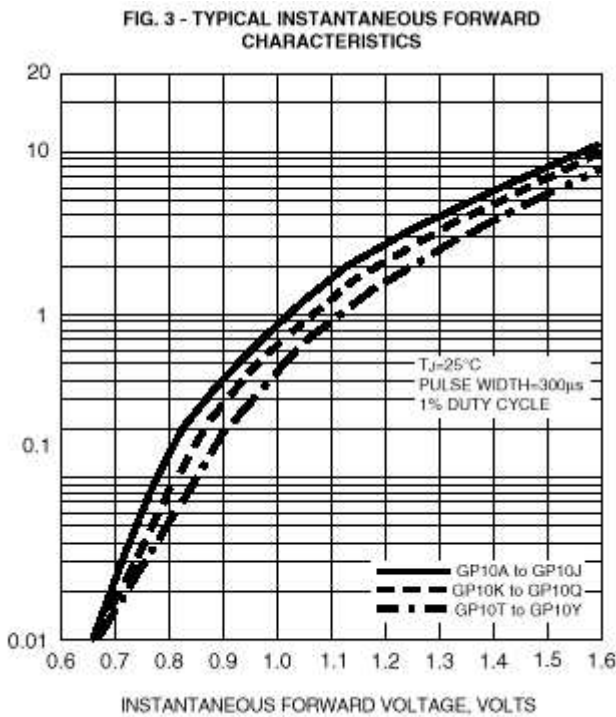


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

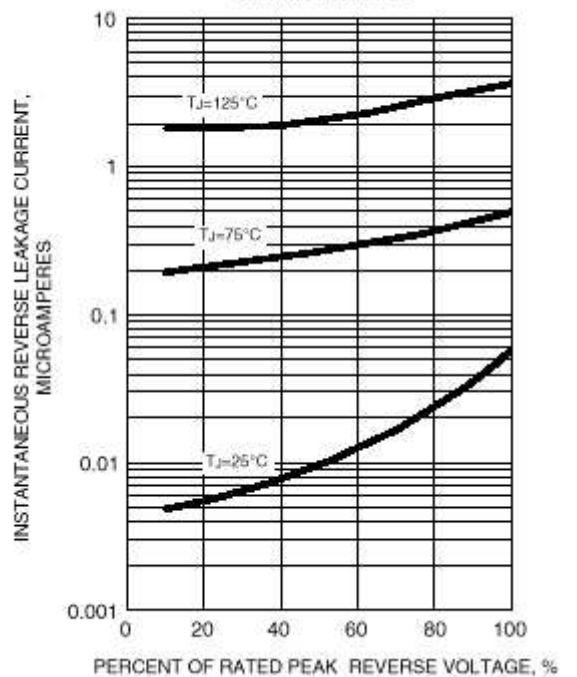


FIG. 5 - MAXIMUM REPETITIVE PEAK REVERSE VOLTAGE, V_{RRM}

GP10A	.....	50V
GP10B	.....	100V
GP10D	.....	200V
GP10G	.....	400V
GP10J	.....	600V
GP10K	.....	800V
GP10M	.....	1000V

1 Rev.A4

FIG. 6 - TYPICAL JUNCTION CAPACITANCE

