

BY448GP

SINTERED GLASS JUNCTION PLASTIC RECTIFIER

VOLTAGE:1500V

CURRENT: 2.0A



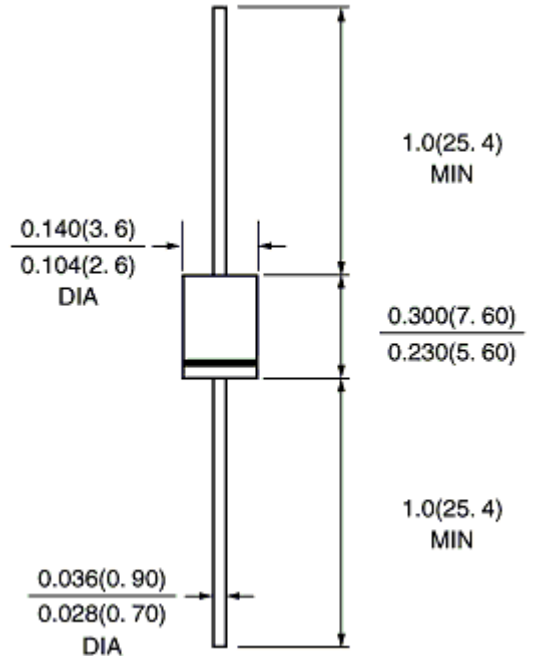
FEATURE

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

DO-15/DO-204C



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	BY448GP	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	1650	V
Maximum RMS Voltage	V _{rms}	1150	V
Maximum DC blocking Voltage	V _d	1650	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}	30.0	A
Maximum Instantaneous Forward Voltage at 3.0A	V _f	1.60	V
Maximum full load reverse current full cycle Average at 55°C	I _{r(av)}	100.0	μA
Maximum DC Reverse Current at rated DC blocking voltage	I _r	5.0 150.0	μA μA
Typical Reverse Recovery Time (Note 1)	T _{rr}	1000	nS
Typical Thermal Resistance (Note 2)	R _{th(ja)}	100	K/W
Storage and Operating Junction Temperature	T _{stg} , T _j	-65 to +175	°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. Thermal Resistance from Junction to Ambient on PC board with spacing 25mm

RATINGS AND CHARACTERISTIC CURVES BY448GP

FIG. 1 - FORWARD CURRENT DERATING CURVE

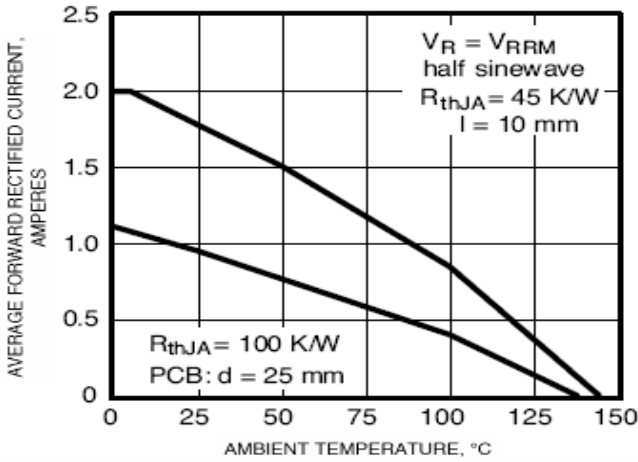


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

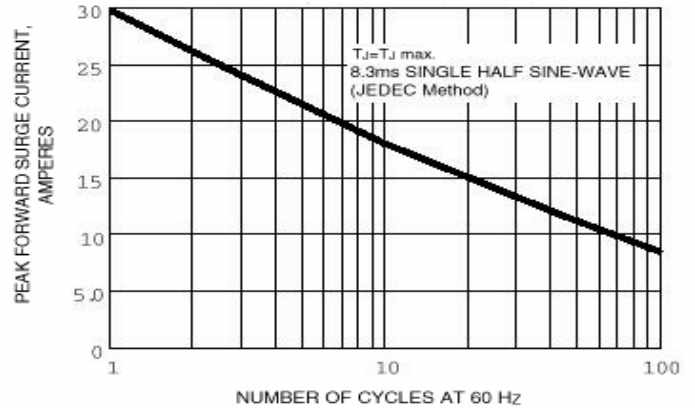


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

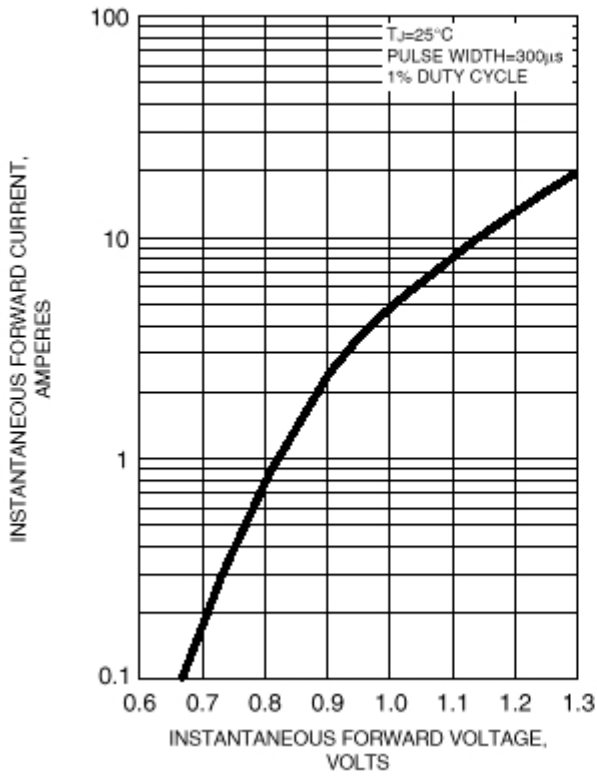


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

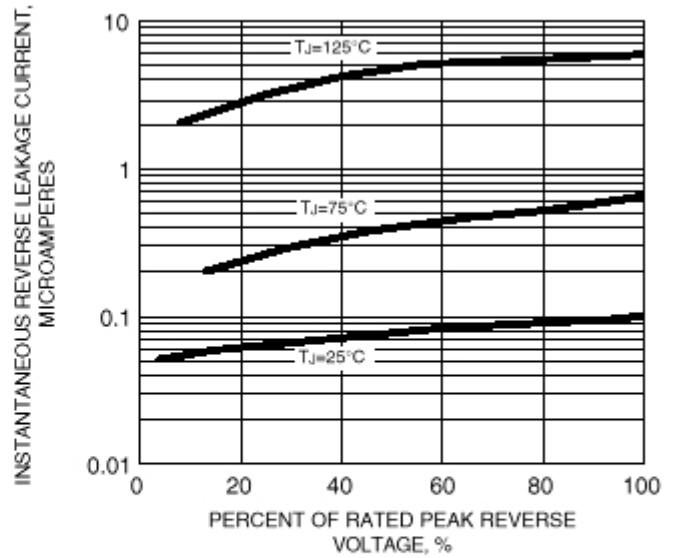


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

