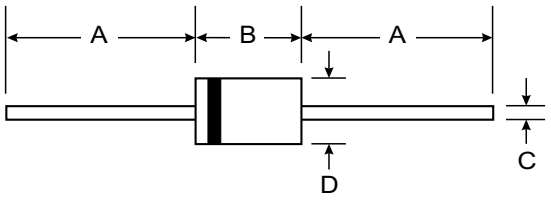
BY448GP

2.0A Axial Leaded Sintered Class Junction Plastic Rectifier

Features

- 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-15		
Dim	**Min**	**Max**
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics

@ T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

	SYMBOL	BY448GP	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	1650	V
Maximum RMS Voltage	Vrms	1150	V
Maximum DC blocking Voltage	Vdc	1650	V
Maximum Average Forward Rectified Current 3/8”lead length at Ta =55°C	If(av)	2.0	A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	Ifsm	30.0	A
Maximum Instantaneous Forward Voltage at 3.0A	Vf	1.60	V
Maximum full load reverse current full cycle Average at 55°C	Ir(av)	100.0	μA
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C	Ir	5.0 150.0	μA μA
Typical Reverse Recovery Time (Note 1)	Trr	1000	nS
Typical Thermal Resistance (Note 2)	Rth(ja)	100	K/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. Thermal Resistance from Junction to Ambient on PC board with spacing 25mm

FIG. 1 - FORWARD CURRENT DERATING CURVE

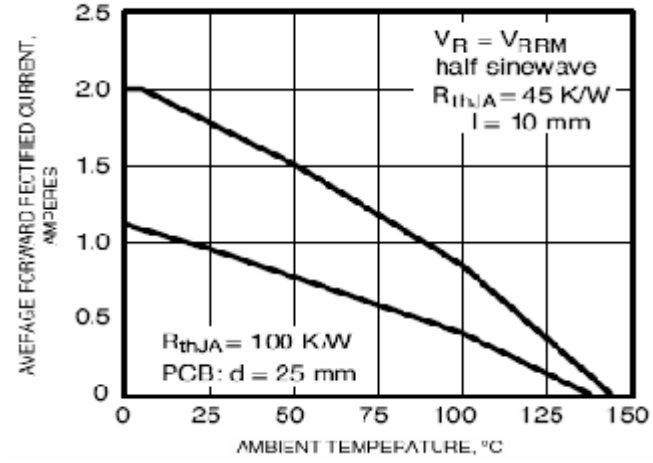


FIG. 2 - MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT

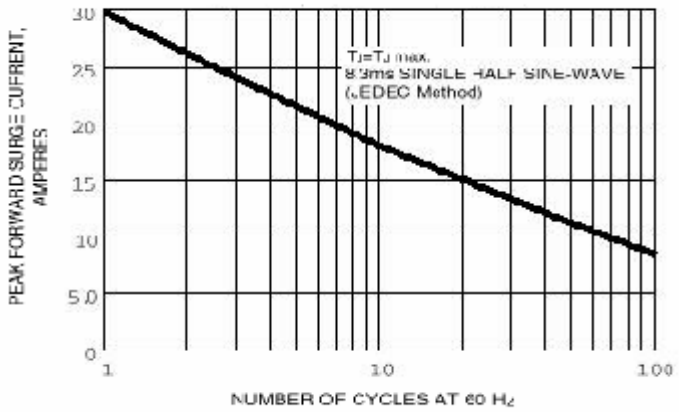


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

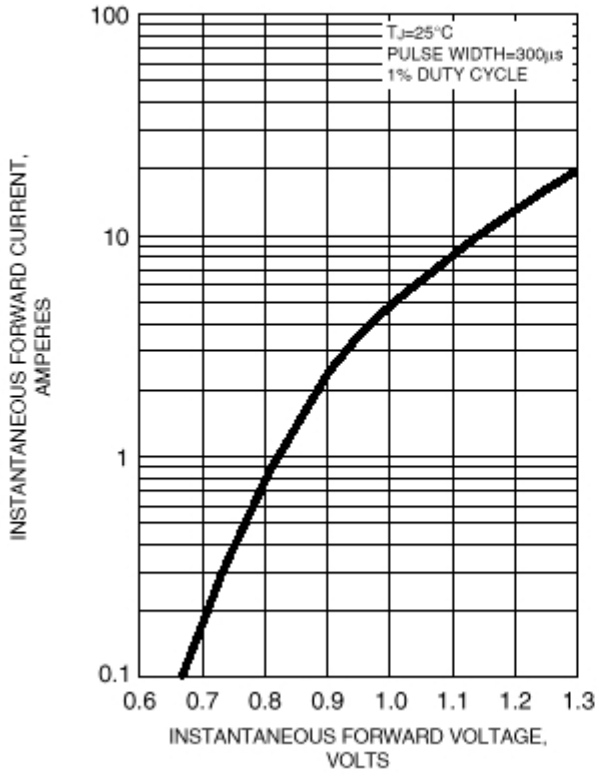


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

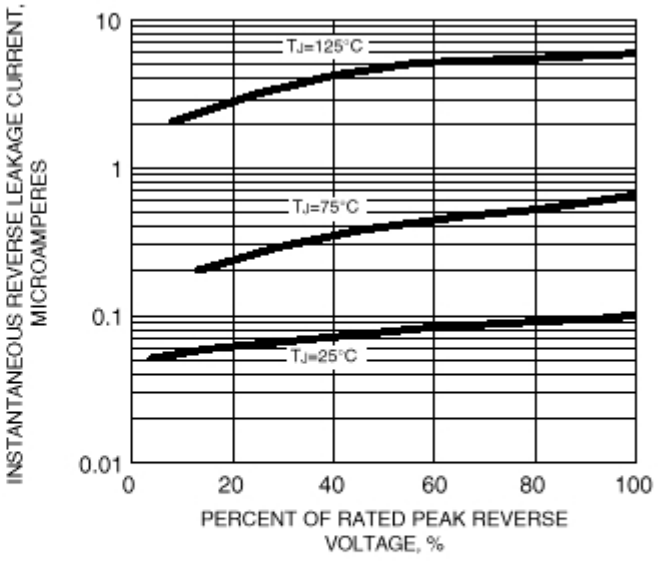


FIG. 5 - TYPICAL JUNCTION CAPACITANCE