Certificate Number: Q10561

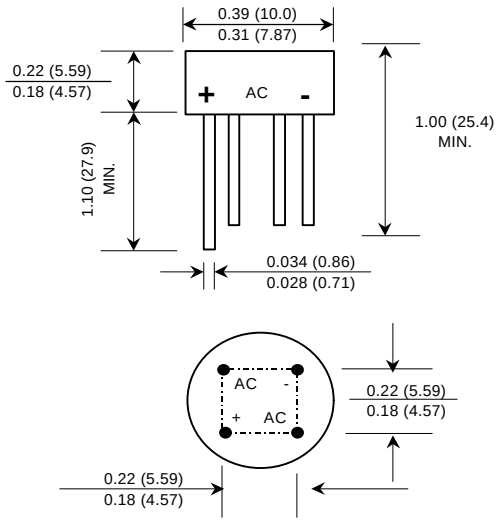
Certificate Number: E17276

AB40 - AB380/C 1000G

AVALANCHE GLASS PASSIVATED BRIDGE RECTIFIERS

PRV : 100 - 900 Volts
Io : 1.0 Amperes

WOB



Dimension in inches and (millimeter)

FEATURES :

* Glass passivated chip
* High case dielectric strength
* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* Ideal for printed circuit board
* Pb / RoHS Free

MECHANICAL DATA :

* Case : Reliable low cost construction utilizing molded plastic technique
* Epoxy : UL94V-O rate flame retardant
* Terminals : Plated leads solderable per MIL-STD-202, Method 208 guaranteed
* Polarity : Polarity symbols marked on case
* Mounting position : Any
* Weight : 1.29 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	AB40-C1000G	AB80-C1000G	AB125-C1000G	AB250-C1000G	AB380-C1000G	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	300	600	900	V
Maximum RMS Input Voltage R+C -Load	V_{RMS}	40	80	125	250	380	V
Maximum DC Blocking Voltage	V_{DC}	100	200	300	600	900	V
Minimum Avalanche Breakdown Voltage at 100 µA	$V_{BO(min.)}$	150	250	350	700	1000	V
Maximum Avalanche Breakdown Voltage at 100 µA	$V_{BO(max.)}$	600	700	800	1150	1450	V
Maximum Average Forward Current For Free Air Operation at Tc = 45°C R+L -Load C -Load	$I_{F(AV)}$	1.2 1.0					A
Peak Forward Surge Current Single half sine wave on rated load (JEDEC Method) at T_J = 125 °C	I_{FSM}	40					A
Rating for fusing at T_J = 125°C (t < 100 ms.)	I^2t	10					A^2S
Maximum Series Resistor C-Load V_{RMS} = ± 10%	Rt	1.0	2.0	4.0	8.0	12.0	Ω
Maximum load Capacitance + 50% -10%	C_L	5000	2500	1000	500	200	µF
Maximum Forward Voltage per Diode at I_F = 1.0 A	V_F	1.0					V
Maximum Reverse Current at Rated Repetitive Peak Voltage per Diode Ta = 25 °C	I_R	10					µA
Typical Thermal Resistance (Note 1)	RθJA	36					°C/W
Operating Junction Temperature Range	T_J	- 50 to + 125					°C
Storage Temperature Range	T_{STG}	- 50 to + 125					°C

Notes :

1) Thermal resistance from Junction to Ambient at 0.375" (9.5 mm) lead length P.C. Board with, 0.22" x 0.22" (5.5 x 5.5 mm) copper Pads.

RATING AND CHARACTERISTIC CURVES (AB40 - AB380/C1000G)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT AB40 C1000G - AB125 C1000G

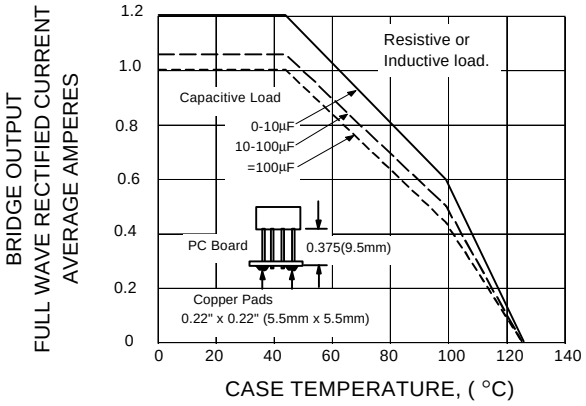


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT AB250 C1000G - AB380 C1000G

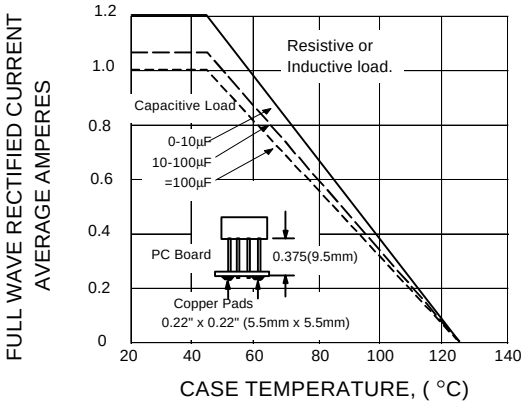


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

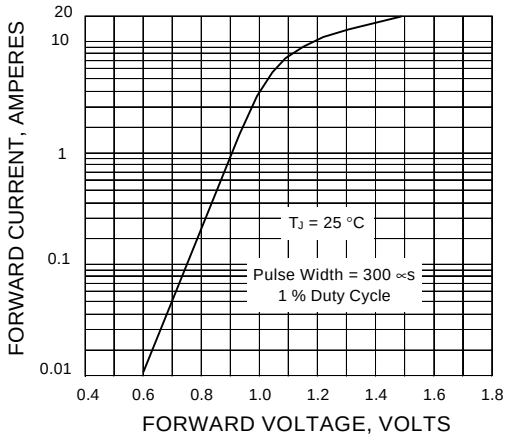


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

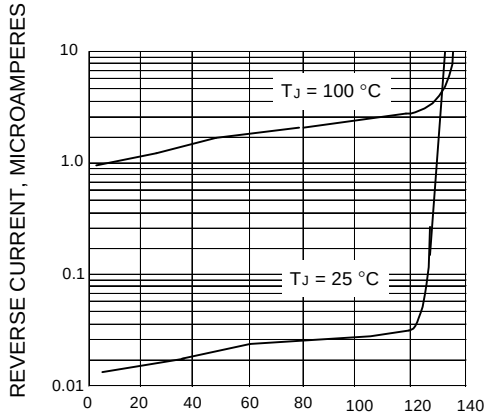


FIG.5 - MAXIMUM NON-REPETITIVE PEAK FORWARD CURRENT

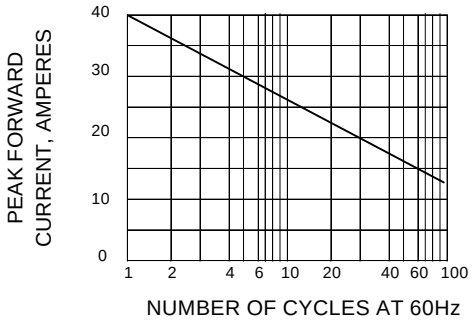


FIG. 6 - TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

