

MINI SILICON SURFACE MOUNT BRIDGE RECTIFIER

ABS1 THRU ABS10 Vishaymas General Semiconductor

FEATURES

- Ideal for printed circuit board
- Reliable low cost construction technique results in inexpensive product
- High temperature soldering guaranteed : 260°C / 10 seconds / 0.375" (9.5mm) lead length at 5 lbs., (2.3 kg) tension

MECHANICAL DATA

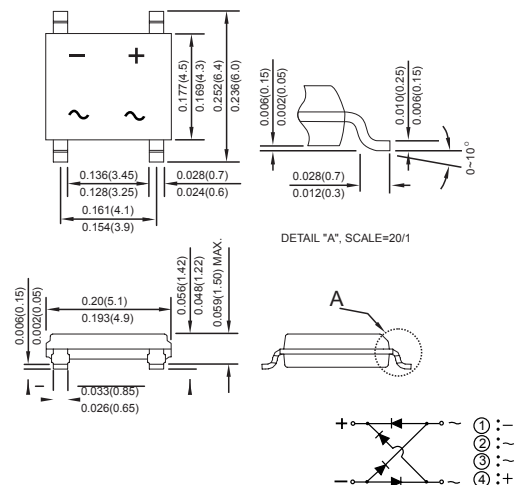
Case : Molded Plastic

Epoxy : Device has UL flammability classification 94V-0

Mounting Position : Any

Marking : Type Number

ABS



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Characteristic	Symbol	ABS1	ABS2	ABS4	ABS6	ABS8	ABS10	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}							
DC Blocking Voltage	V_R							
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	420	560	700	V
Average Rectified Output Current -On glass-epoxy P.C.B. -On aluminum substrate	I_o				0.8 1.0			A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}				30			A
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t				10			A ² s
Forward Voltage per element @ $I_F = 0.4A$	V_{FM}				0.95			V
Peak Reverse Current At Rated DC Blocking Voltage @ $T_A = 25^\circ C$ @ $T_A = 125^\circ C$	I_{RM}				10 150			μA
Typical Junction Capacitance per leg (Note 2)	C_j				25			pF
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$				62.5 25			$^\circ C/W$
Operating and Storage Temperature Range	T_j, T_{STG}				-55 to +150			$^\circ C$

Note: 1. On aluminum substrate P.C.B. with an area of 0.8×0.8"(20×20mm) mounted on 0.05×0.05"(1.3×1.3mm) solder pad.

2. On glass epoxy P.C.B. mounted on 0.05×0.05"(1.3×1.3mm) pads.

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

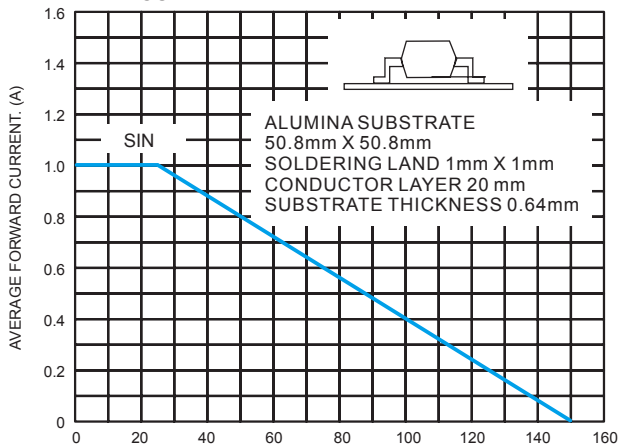


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

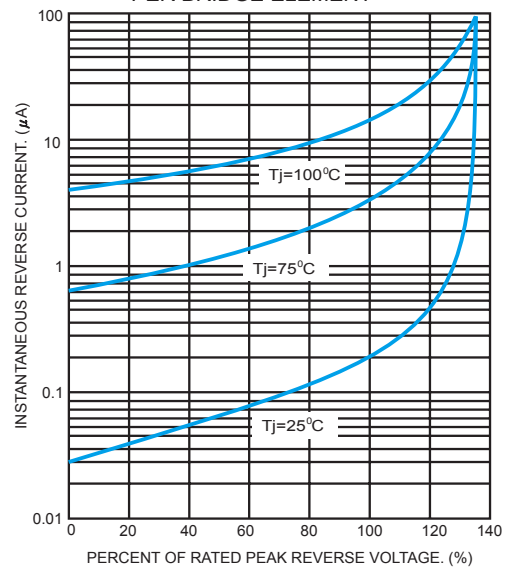


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

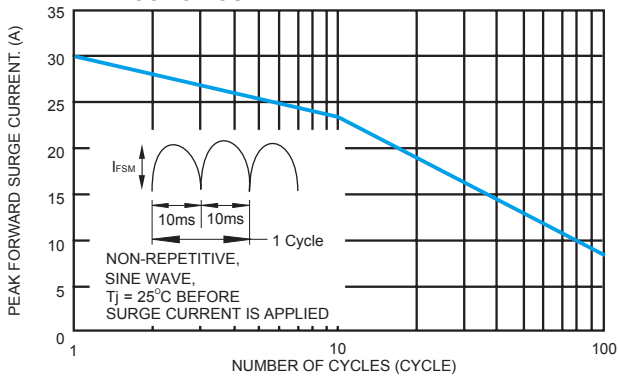


FIG.4- TYPICAL JUNCTION CAPACITANCE

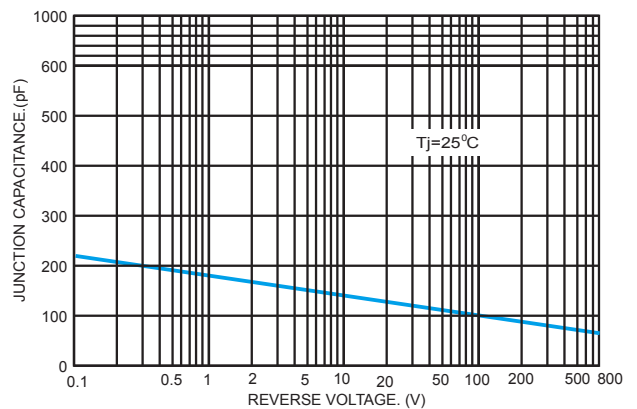


FIG.5- TYPICAL FORWARD CHARACTERISTICS

