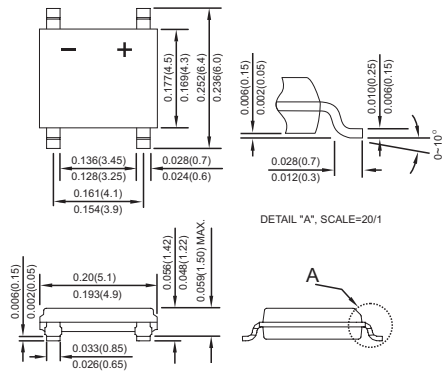
TAIWAN SEMICONDUCTOR

ABS2 - ABS10

Single Phase 1.0 AMP. Glass Passivated Bridge Rectifiers

RoHS COMPLIANCE

ABS



Features

- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction utilizing molded plastic technique
- ✧ High temperature soldering guaranteed: 260°C / 10 seconds / 0.375" (9.5mm) lead length at 5 lbs., (2.3 kg) tension
- ✧ Small size, simple installation
  Pure tin plated terminal , Lead free. Leads solderable per MIL-STD-202, Method 208
- ✧ High surge current capability

Dimensions in inches and (millimeters)

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%

Type Number	Symbol	ABS2	ABS4	ABS6	ABS8	ABS10	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	1000	V
Maximum Average Forward Rectified Current On glass-epoxy P.C.B. On aluminum substrate	$I_{(AV)}$	0.8 1.0					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30					A
Maximum Instantaneous Forward Voltage @ 0.4A	V_F	095					V
Maximum DC Reverse Current @ T_A=25 °C at Rated DC Blocking Voltage @ T_A=125 °C	I_R	10 150					uA uA
Typical Thermal resistance Junction to Lead On aluminum substrate On Glass-Epoxy substrate	$R_{\theta JL}$ $R_{\theta JA}$	25 62.5 80					°C/W
Operating Temperature Range	T_J	-55 to +150					°C
Storage Temperature Range	T_{STG}	-55 to +150					°C

RATINGS AND CHARACTERISTIC CURVES (ABS2 THRU ABS10)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

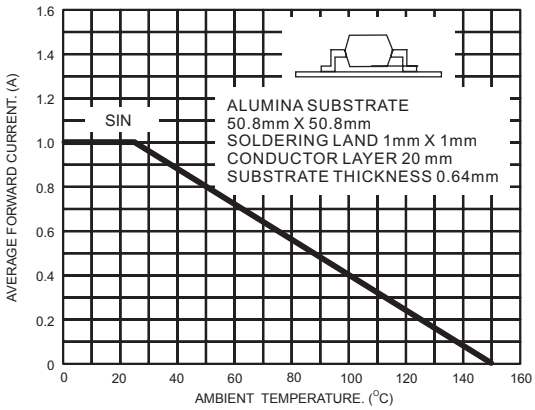


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

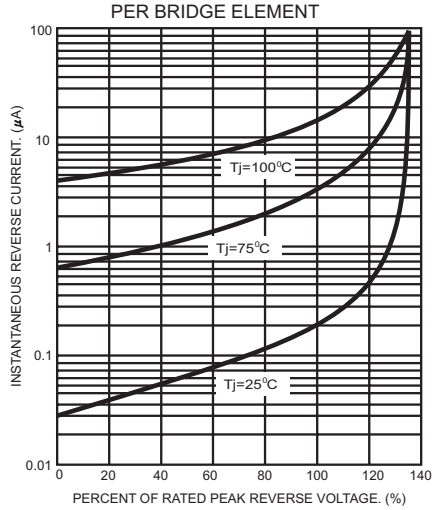


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

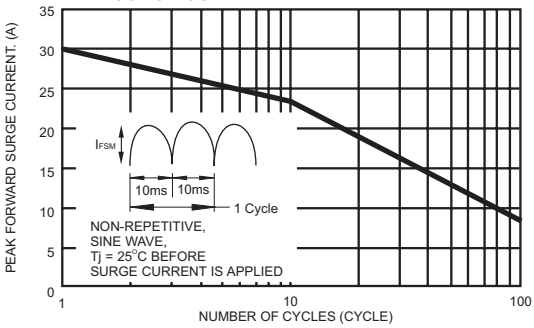


FIG.4- TYPICAL JUNCTION CAPACITANCE

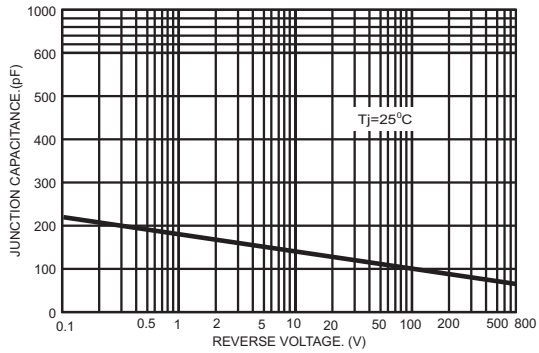


FIG.5- TYPICAL FORWARD CHARACTERISTICS