SAMYANG ELECTRONICS

ABS1 --- ABS10

SILICON BRIDGE RECTIFIERS

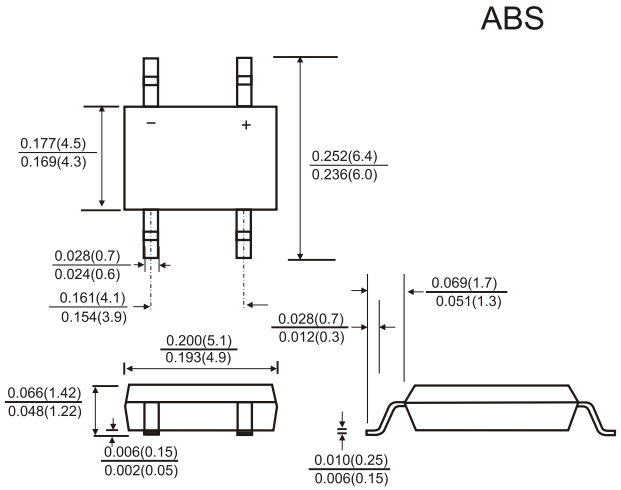
VOLTAGE RANGE: 100 --- 1000 V
CURRENT: 1.0 A

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Rating to 1000V PRV
- Ideal for printed circuit board
  High temperature soldering guaranteed:260°C/10 seconds at terminals
  Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- *Case*: ABS molded plastic body
- *Epoxy:* UL94V-0 rate flame retardant
- *Terminals*: Plated leads solderable per MIL-STD-750,method 2026
- *Mounting Position*: Any
- *Weight*: 0.0044ounce, 0.125 gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

		Symbols	ABS1	ABS2	ABS4	ABS6	ABS8	ABS10	Units
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current		$I_{(AV)}$	1.0						Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	30						Amps
Maximum Instantaneous Forward Voltage at 1.0 A DC		V_F	0.95						Volts
Maximum DC Reverse Current at rated DC blocking voltage	T_A=25°C	I_R	10						μA
	T_A=125°C		500						
Typical junction capacitance(Note2)		C_J	25						pF
Typical thermal resistence(Note 3)		$R_{\theta JA}$	62						K/W
Operating junction and storage temperature range		T_J T_{STG}	-55 to +150						°C

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance from junction to ambient.

FIG.1-TYPRCAL FORWARD CURRENT DERATING CURVE

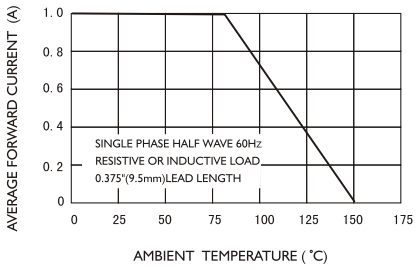


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

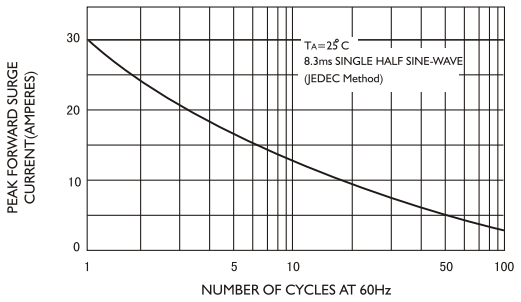


FIG3-TYPICAL JUNCTION CAPACITANCE

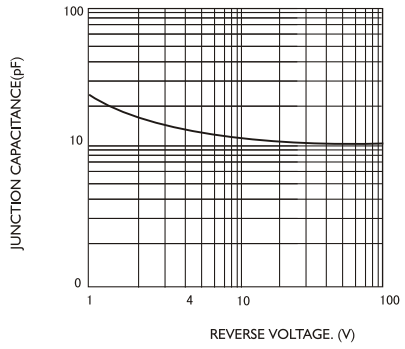


FIG4-TYPICAL FORWARD CHARACTERISTICS

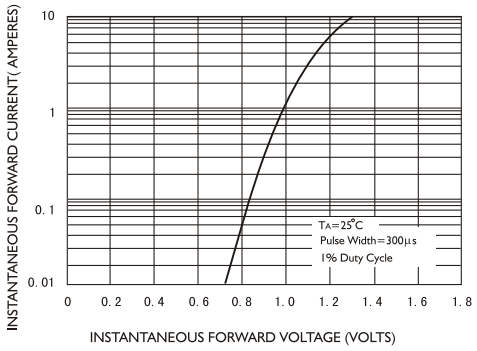


FIG.5-TYPICAL REVERSE CHARACTERISTICS

