AB52S THRU AB520S

SINGLE PHASE5.0 AMP SURFACE MOUNT BRIDGE RECTIFIERS

VOLTAGE RANGE

20 to 200 Volts

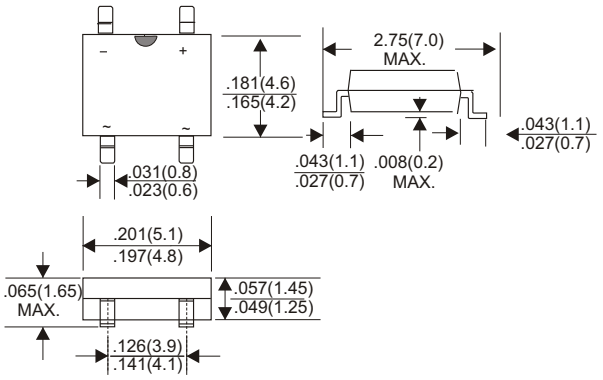
CURRENT

5.0 Ampere

FEATURES

* Ideal for printed circuit board
* Reliable low cost construction utilizing molded plastic technique
* High surge current capability
* Polarity: Symbol molded on body
* Mounting position: Any
* Weight: 0.12 grams

ABS



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	AB52S	AB54S	AB56S	AB58S	AB510S	AB515S	AB520S	UNIT
Maximum Recurrent Peak Reverse Voltage	20	40	60	80	100	150	200	V
Maximum RMS Voltage	14	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	20	40	60	80	100	150	200	V
Maximum Average Forward Rectified Current at Ta=40°C(Note 1)	5.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	120							A
Maximum Forward Voltage Drop per Bridge Element at 5.0A D.C.	0.55		0.7	0.85		0.9		V
Maximum DC Reverse Current Ta=25°C	0.3			0.2		0.1		mA
at Rated DC Blocking Voltage Ta=125°C	10			5		2		mA
Typical Thermal Resistance $R_{\theta JA}$ (Note 2)	75							°C/W
Operating Temperature Range, T_J	-55 —+150							°C
Storage Temperature Range, T_{STG}	-55 —+150							°C

NOTES: 1. Mounted on P.C. Board.
2. Thermal Resistance Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (AB52S THRU AB520S)

Fig.1 Forward Current Derating Curve

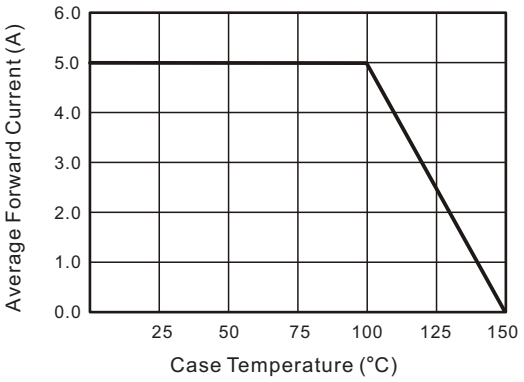


Fig.2 Typical Reverse Characteristics

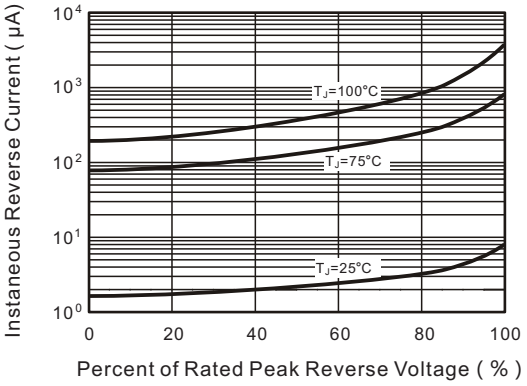


Fig.3 Typical Forward Characteristic

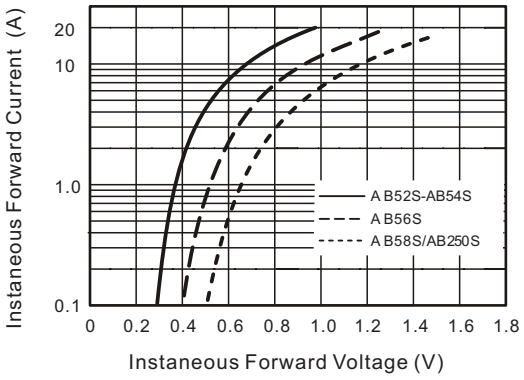


Fig.4 Typical Junction Capacitance

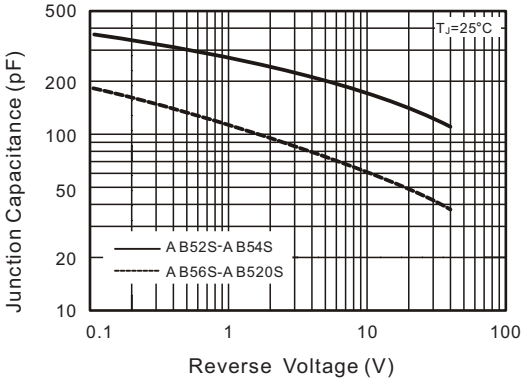


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

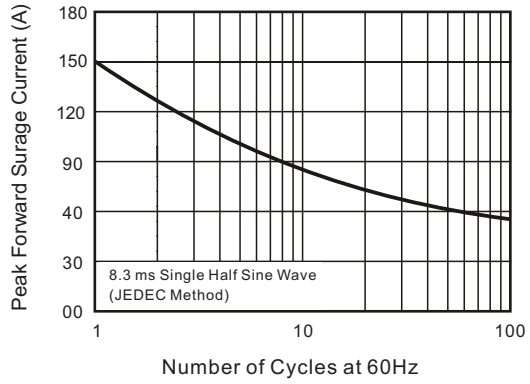


Fig.6- Typical Transient Thermal Impedance