

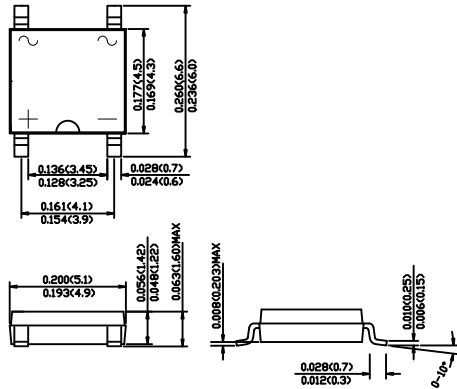


AB14S THRU AB120S

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Voltage Range - 40 to 200 Volts Current - 1.0 Ampere

ABS



Dimensions in inches and (millimeters)

FEATURES

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs., (2.3kg) tension
- ◆ Small size, simple installation
- ◆ High surge current capability

MECHANICAL DATA

Case: Molded plastic body

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbols marked on case

Mounting Position: Any

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 derate current by 20%.

MDD Catalog Number	SYMBOLS	AB14S	AB16S	AB18S	AB110S	AB120S	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	40	60	80	100	200	VOLTS
Maximum RMS voltage	V_{RMS}	28	42	56	70	140	VOLTS
Maximum DC blocking voltage	V_{DC}	40	60	80	100	200	VOLTS
Maximum average forward rectified current	$I_{F(AV)}$	1.0					Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	40		30			Amps
Maximum instantaneous forward voltage drop per leg at 1A	V_F	0.55	0.70	0.85			Volts
Maximum DC reverse current at rated DC blocking voltage	I_R	0.3		0.2	0.1		mA
		10		5	2		mA
Typical junction capacitance	C_j	110	80			pF	
Typical thermal resistance	$R_{\theta JA}$	95					°C/W
Operating temperature range	T_J	-55 to +125					°C
storage temperature range	T_{STG}	-55 to +150					°C

NOTE: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with 4 X (5X5mm) copper pad.

RATINGS AND CHARACTERISTIC CURVES AB14S THRU AB120S

Fig.1 Forward Current Derating Curve

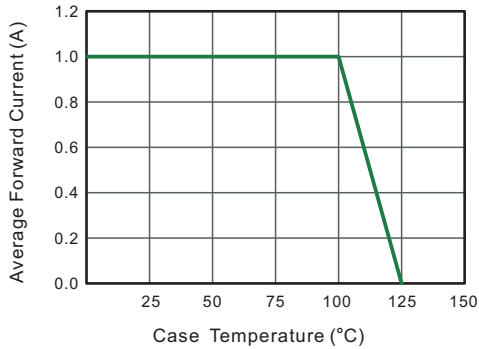


Fig.2 Typical Reverse Characteristics

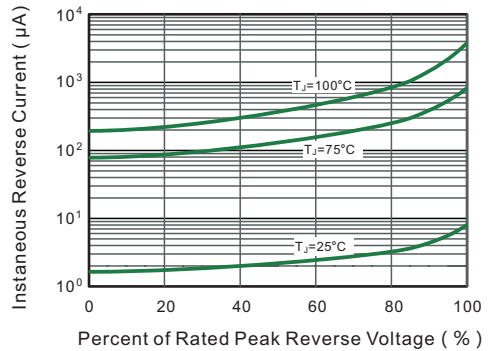


Fig.3 Typical Forward Characteristic

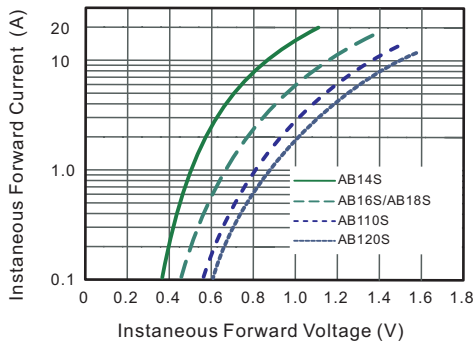


Fig.4 Typical Junction Capacitance

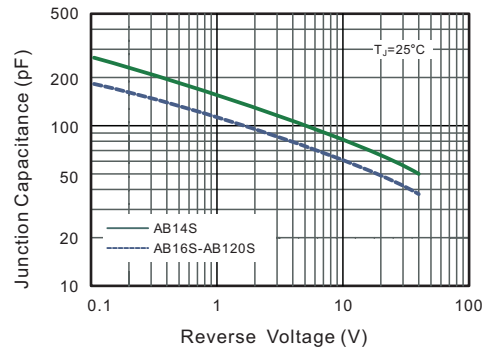


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

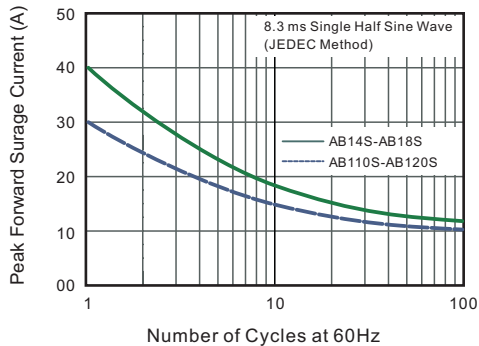


Fig.6- Typical Transient Thermal Impedance

