



AB14S THRU AB120S

Voltage Range - 40 to 200 V olts Current - 1.0 Ampere

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Features

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

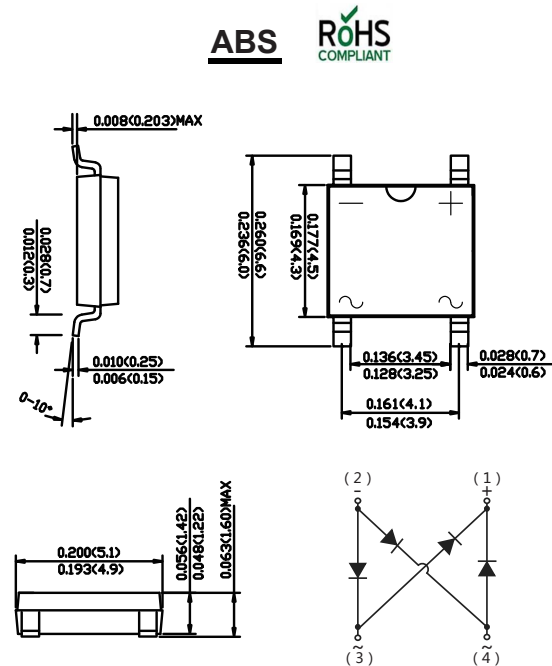
Mechanical Data

Case : JEDEC ABS Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

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 current derate by 20%.

Parameter	SYMBOLS	MDD AB14S	MDD AB16S	MDD AB18S	MDD AB110S	MDD AB120S	UNITS
Marking Code							
Maximum repetitive peak reverse voltage	V _{RRM}	40	60	80	100	200	V
Maximum RMS voltage	V _{RMS}	28	42	56	70	140	V
Maximum DC blocking voltage	V _{DC}	40	60	80	100	200	V
Maximum average forward rectified current	I _{F(AV)}	1.0					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	40		30			A
Maximum instantaneous forward voltage drop per leg at 1A	V _F	0.55	0.70	0.85			V
Maximum DC reverse current at rated DC blocking voltage	T _A =25°C T _A =100°C I _R	0.3 10		0.2 5		0.1 2	mA mA
Typical thermal resistance	R _{θJA}	95					°C/W
Typical junction capacitance	C _J	110	80				pF
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 P C board with 4 X (5X5mm) copper pad.



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Ratings And Characteristic Curves

Fig.1 Forward Current Derating Curve

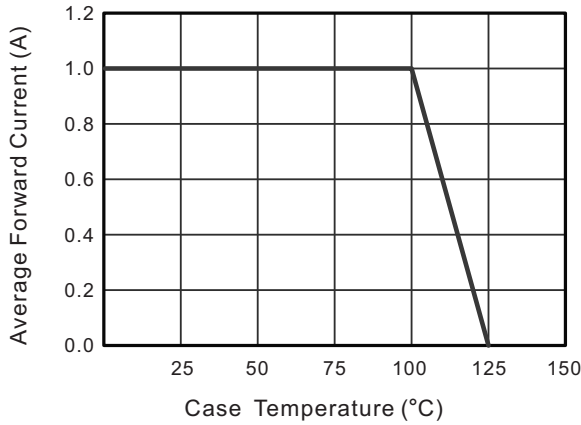


Fig.2 Typical Reverse Characteristics

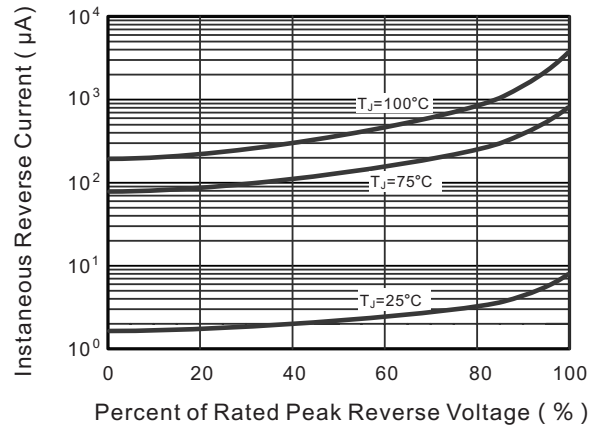


Fig.3 Typical Forward Characteristic

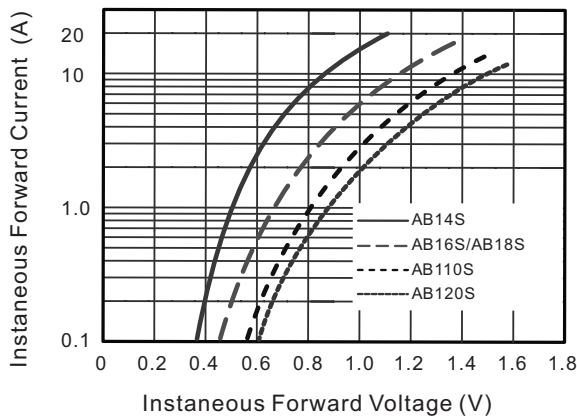


Fig.4 Typical Junction Capacitance

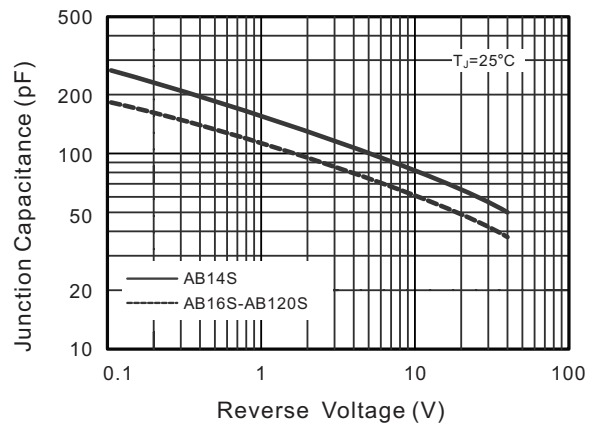


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

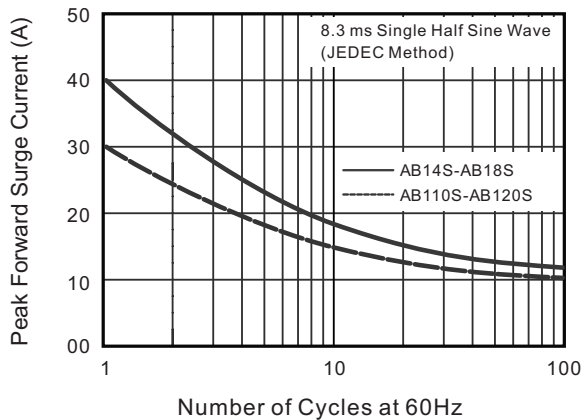
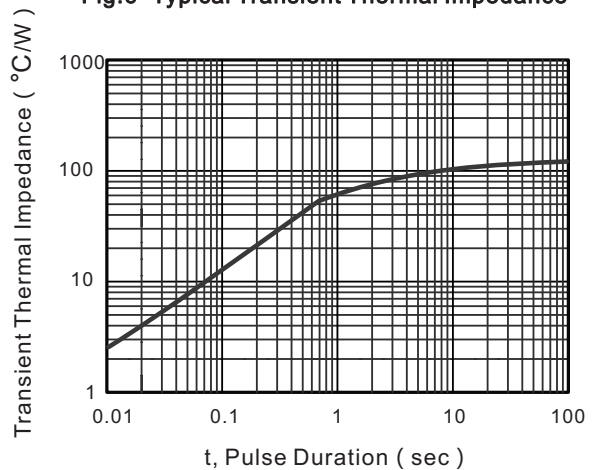
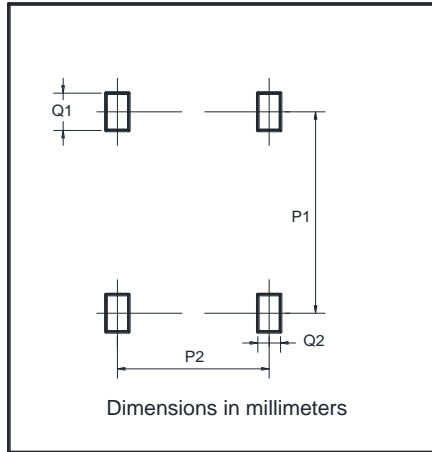


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.

Suggested Pad Layout



Dim	Min
P1	5.72
P2	4.00
Q1	1.00
Q2	0.90