

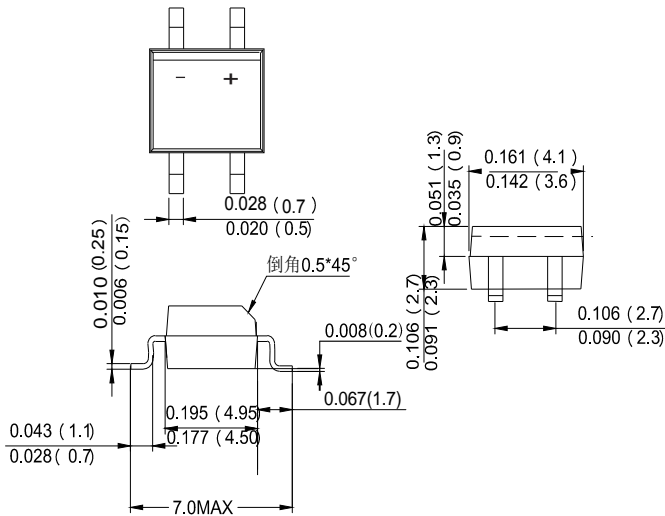


MB14S THRU MB120S

Schottky Surface Mount Flat Bridge Rectifier

Reverse Voltage - 40 to 200 Volts Forward Current - 1.0 Amperes

MBS



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

Weight: 0.008 ounce, 0.22 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

MDD Catalog Number	Symbol	MB14S	MB16S	MB18S	MB110S	MB120S	UNIT
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 0.2×0.2"(5.0×5.0mm)copper pad area	I _{F(AV)}	1.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	30					A
Maximum instantaneous forwad voltage at 1.0A	V _F	0.55	0.70	0.85	0.90		V
Maximum DC reverse current T _A = 25 °C at Rated DC blocking voltage T _A = 100°C	I _R	0.3 10		0.2 5	0.1 2		mA
Typical Junction Capacitance at 4.0V,1.0MHz	C _J	110	80				pF
Typical Thermal resistance (Note1)	R _{θJA} R _{θJL}	100 20					°C/ W
Operating junction temperature range	T _J	−55 to +125					°C
Storage temperature range	T _{STG}	− 55 to +150					°C

Note: 1. Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2×0.2" (5.0×5.0mm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES MB14S THRU MB110S

Fig.1 Forward Current Derating Curve

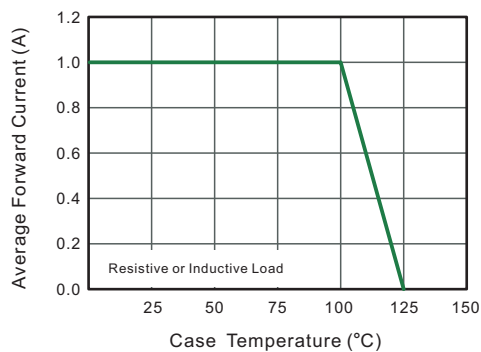


Fig.2 Typical Reverse Characteristics

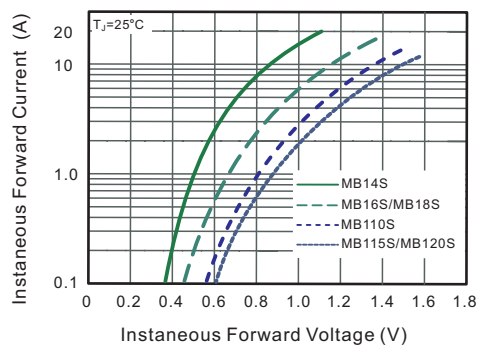
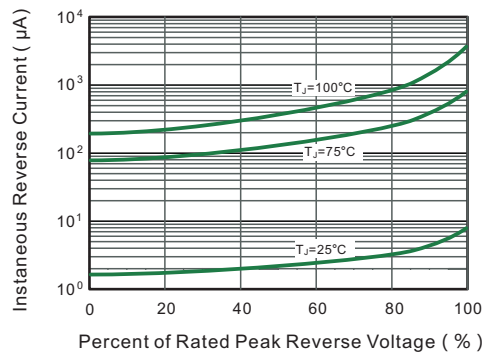


Fig.4 Typical Junction Capacitance

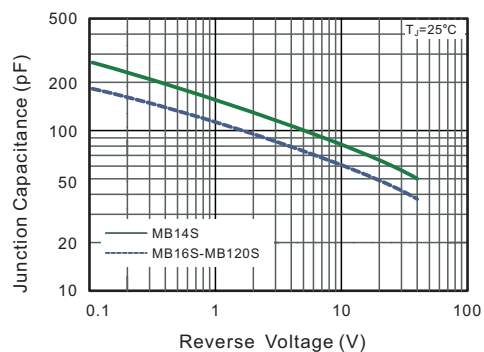


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

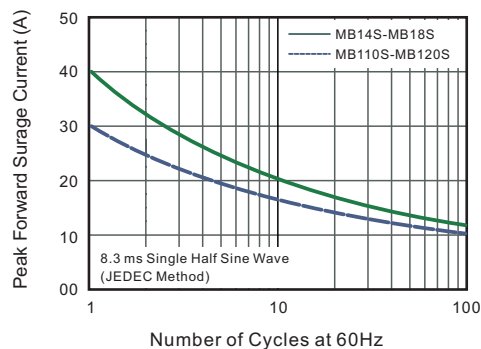
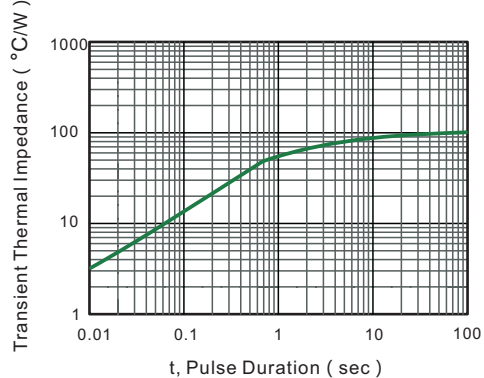


Fig.6- Typical Transient Thermal Impedance



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!