

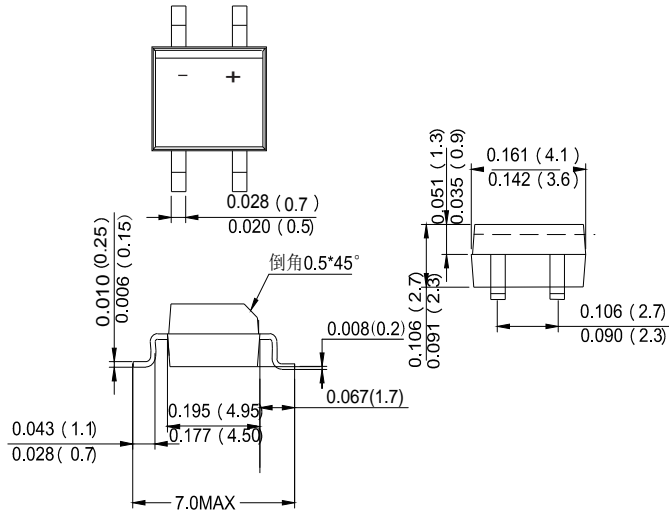


MB14S THRU MB120S

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 forward voltage at 1.0A	V_F	0.55	0.70	0.85	0.90		V
Maximum DC reverse current at Rated DC blocking voltage	I_R	$T_A = 25^\circ C$ 0.3		0.2	0.1		mA
		$T_A = 100^\circ C$ 10		5	2		
Typical Junction Capacitance at 4.0V, 1.0MHz	C_J	110	80				pF
Typical Thermal resistance (Note1)	$R_{\theta JA}$	100					°C/W
	$R_{\theta JL}$	20					
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.



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RATINGS AND CHARACTERISTIC CURVES MB14S THRU MB110S

Fig.1 Forward Current Derating Curve

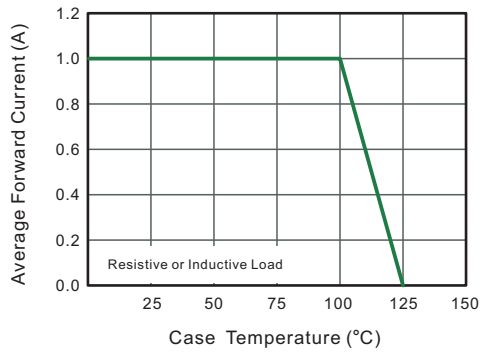


Fig.2 Typical Reverse Characteristics

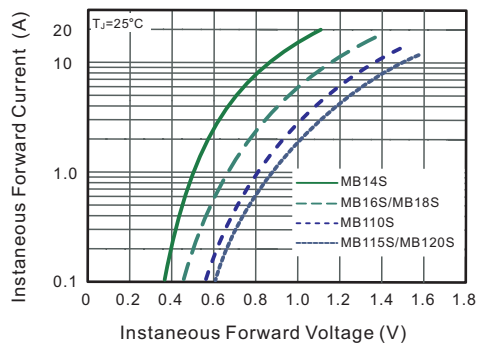
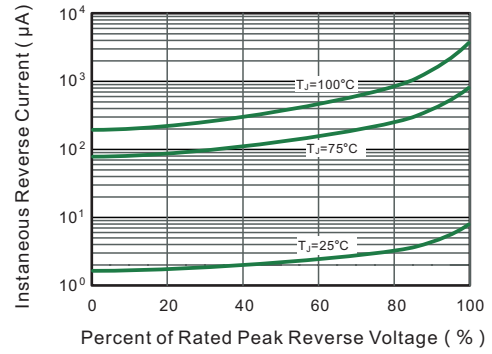


Fig.4 Typical Junction Capacitance

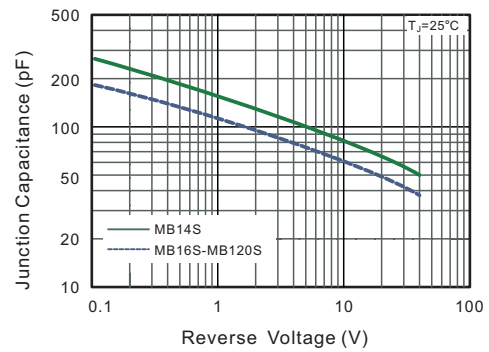


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

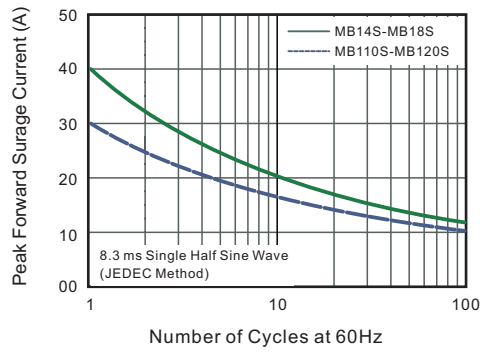
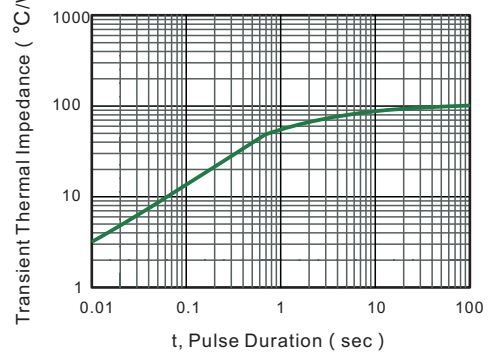


Fig.6- Typical Transient Thermal Impedance



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

