MB34S THRU MB320S

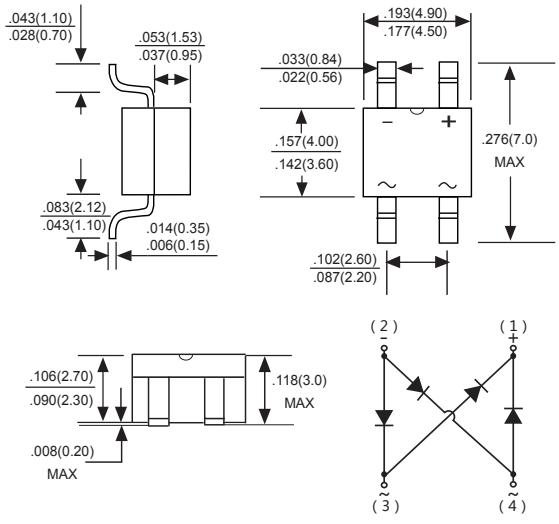
Voltage Range - 40 to 200 V olts Current - 2.0 Ampere

Schottky Surface Mount Flat Bridge Rectifier

Features

- ◆Reverse Voltage - 40 t o 200 V
- ◆Forward Current - 3.0 A
- ◆High Surge Current Capability
- ◆Designed for Surface Mount Application

MBS



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC MBS Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.008 ounce, 0.22 grams

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unlss otherwise specified.

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

Parameter Marking Code	SYMBOLS	MDD MB34S	MDD MB36S	MDD MB38S	MDD MB310S	MDD MB320S	UNITS
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	$I_{F(AV)}$	3.0					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50		70			A
Maximum instantaneous forward voltage at 2A	V_F	0.55	0.70	0.85		0.95	V
Maximum DC reverse current T_A=25°C at rated DC blocking voltage T_A=100°C	I_R	0.5 10	0.3 5				mA
Typical junction capacitance at 4.0V,1.0MHz	C_j	250	160				pF
Typical thermal resistance	$R\theta_{JA}$	65					°C/W
Operating temperature range	T_J	- 5 5 t o + 1 2 5					°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 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

Ratings And Characteristic Curves

Fig.1 Forward Current Derating Curve

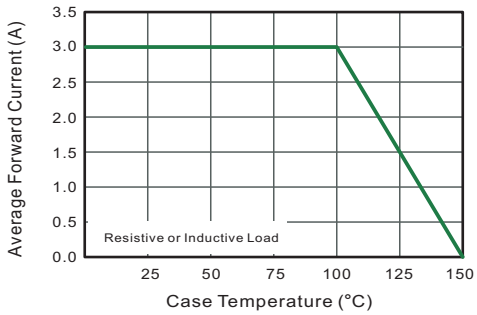


Fig.2 Typical Reverse Characteristics

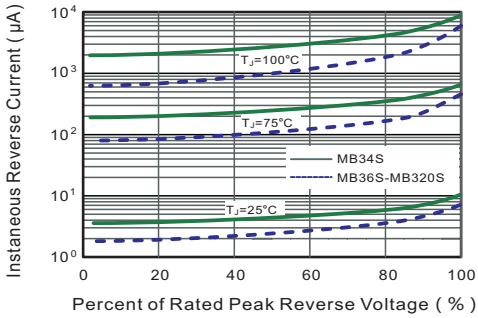


Fig.3 Typical Forward Characteristic

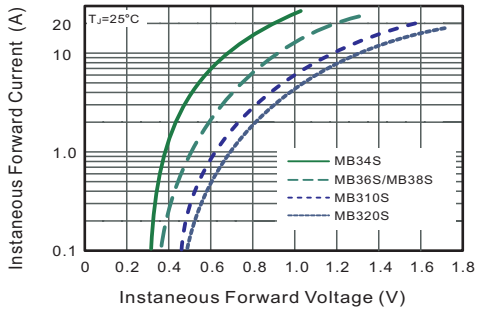


Fig.4 Typical Junction Capacitance

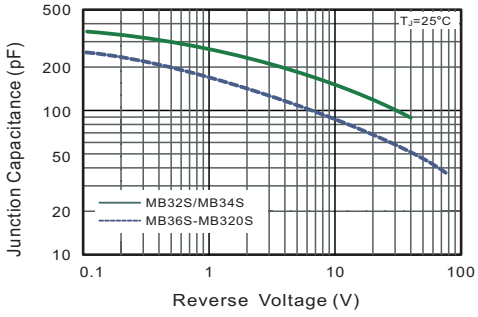


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

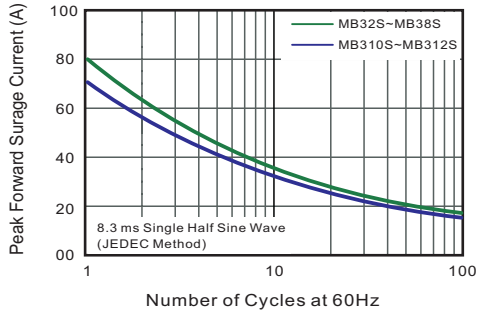
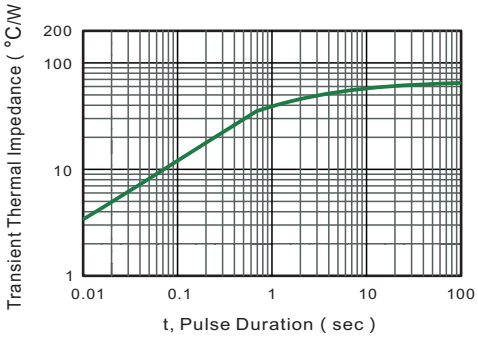
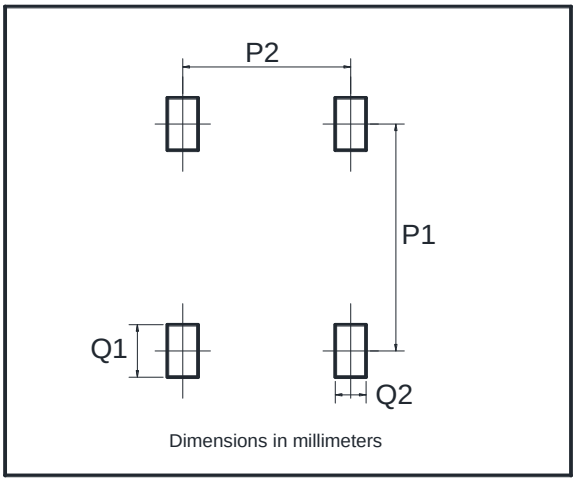


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.

Suggested Pad Layout



Dim	Min
P1	6.00
P2	2.40
Q1	1.84
Q2	1.20