MB24SAT THRU MB220SAT

SURFACE MOUNT SCHOTTKY BRIDGE

Forward Current - 2 A

FEATURES:

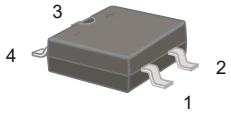
- **Designed for Surface Mount Application**
- **High Surge Current Capability**
- **Reverse Voltage - 40 to 200 V**
- **Forward Current - 2 A**

MECHANICAL DATA

- **Case: MBS**
- **Terminals: Solderable per MIL-STD-750, Method 2026**
- **Approx. Weight: 0.1g**

PINNING

PIN	DESCRIPTION
1	Input Pin (~)
2	Input Pin (~)
3	Output Anode (+)
4	Output Cathode (-)



MBS Package

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	MB24SAT	MB26SAT	MB28SAT	MB210SAT	MB220SAT	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 at T_c = 90°C	$I_{F(AV)}$	2.0					A
Peak Forward Surge Current(NOTE1)	I_{FSM}	50		40			A
Max Instantaneous Forward Voltage at 2 A	V_F	0.55	0.70	0.85			V
Maximum DC Reverse Current T_a = 25°C at Rated DC Reverse Voltage T_a =100°C	I_R	0.5 10			0.3 5		mA
Typical Junction Capacitance(NOTE21)	C_J	220	80				pF
Typical Thermal Resistance (NOTE3)	$R_{\theta JA}$	75					°C/W
Operating Junction Temperature Range	T_J	-55 ~ +125					°C
Storage Temperature Range	T_{stg}	-55 ~ +150					°C

Notes: 1. Measured at 8.3 ms single half sine wave superimposed on rated load (JEDEC Method).
2. Measured at 1MHz and applied reverse voltage of 4 V D.C.
3. Mounted on glass epoxy PC board with 4×1.5"×1.5"（3.81×3.81 cm）copper pad.

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RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

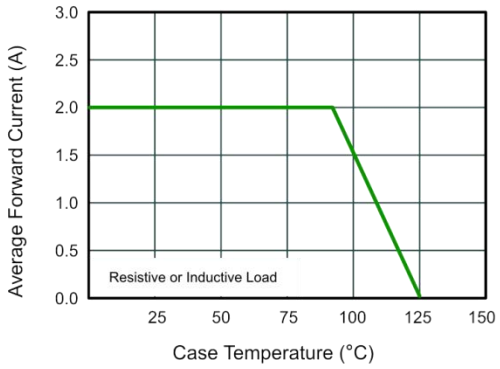


Fig.2 Typical Reverse Characteristics

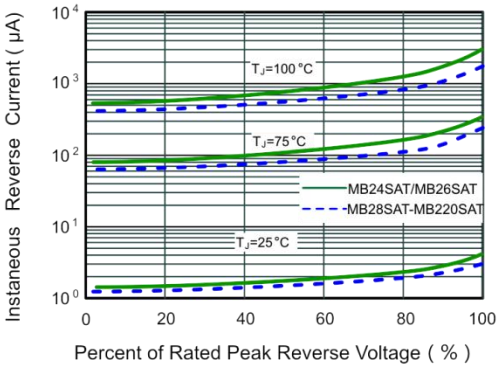


Fig.3 Typical Forward Characteristic

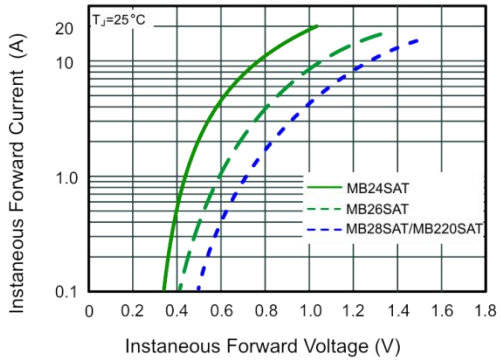


Fig.4 Typical Junction Capacitance

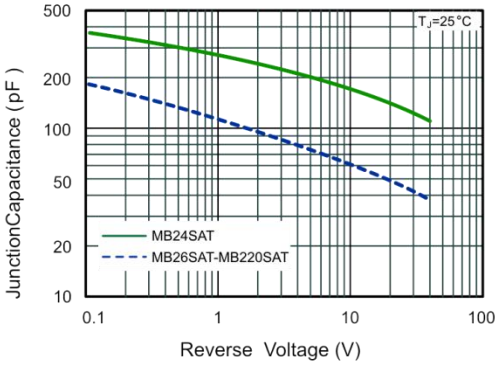


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

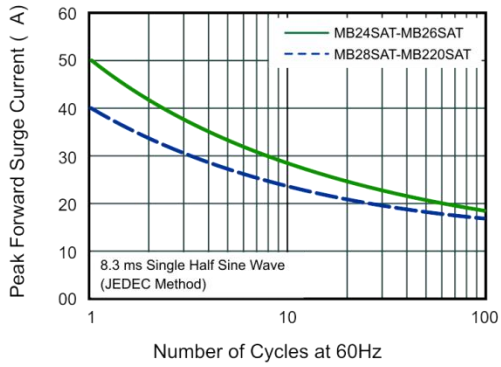
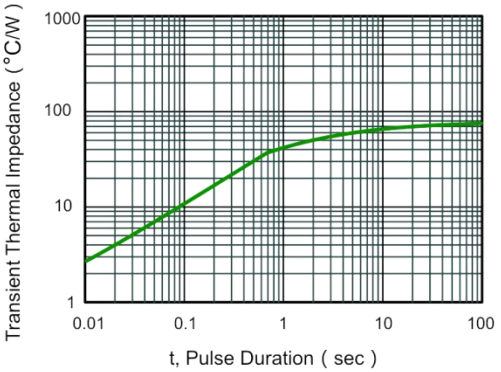


Fig.6- Typical Transient Thermal Impedance



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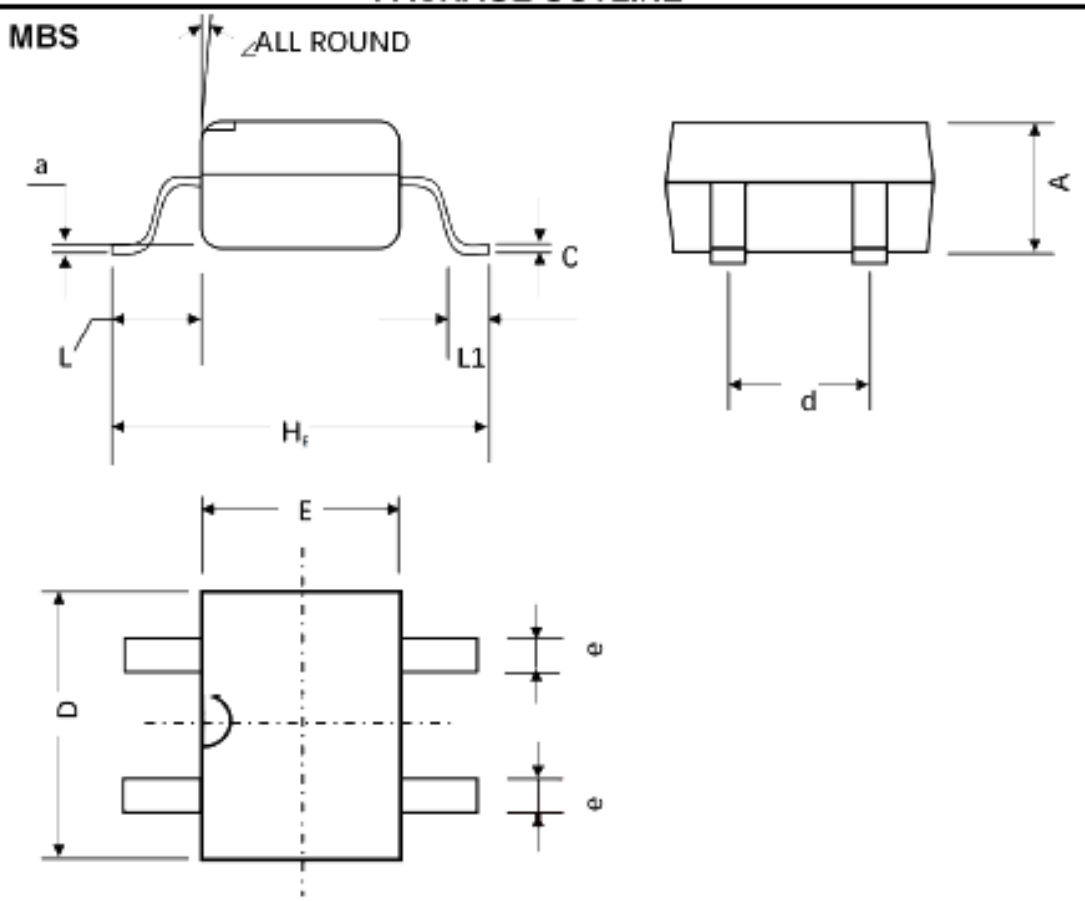
PACKAGE OUTLINE



MBS mechanical data

UNIT		A	C	D	E	H_E	d	e	L	L1	a	∠
mm	max	2.6	0.22	5.0	4.1	7.0	2.7	0.7	1.7	1.1	0.2	7°
	min	2.2	0.15	4.5	3.6	6.4	2.3	0.5	1.3	0.5	—	
mil	max	102	8.7	197	161	276	106	28	67	43	8	
	min	94	5.9	177	142	252	91	20	51	20	—	

ORDERING INFORMATION

Device	Package	Shipping
MB24SAT THRU MB220SAT	MBS	3,000/Tape & Reel (13 inches)

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