



SMD-4

Features

- Ideal for surface mount application
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Surge overload ratings to 30 amperes
- High temperature soldering guaranteed 265°C /10 seconds at 5 lbs (2.3kg) tension

Mechanical Data

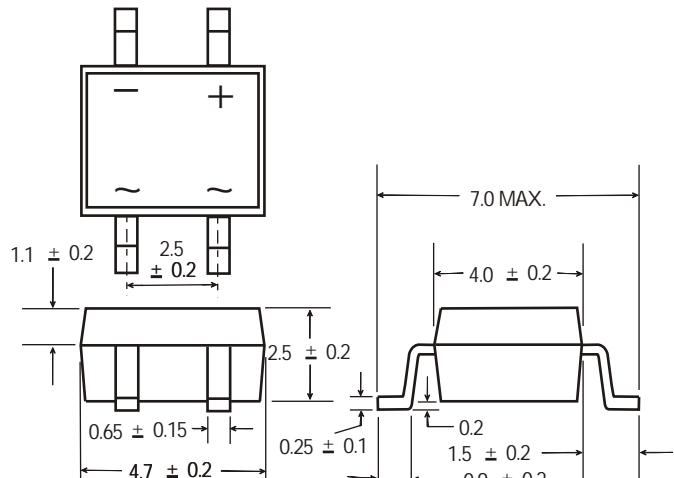
Case: Molded plastic

Terminals: Plated leads solderable per MIL-STD-202,
Method 208

Polarity: Marked on body

Mounting Position: Any

Weight: 0.0044 ounce, 0.125 grams (approx)



Dimensions in millimeters(1mm = 0.0394")

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
For Capacitive load derate current by 20%.

Parameter	Symbol	MB6S	unit
Maximum repetitive peak reverse voltage	VRRM	600	V
Maximum RMS bridge input voltage	VRMS	420	V
Maximum DC blocking voltage	VDC	600	V
Maximum average forward rectified output current at TA=40°C	IF(AV)	0.8	A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	30	A
Rating for fusing (t<8.3ms)	I ² t	10	A ² sec
Typical thermal resistance per element (1)	ReJA	110	°C/W
Typical junction capacitance per element (2)	C _j	25.0	pF
Operating junction and storage temperature range	T _j , T _{STG}	-55 to + 150	°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
For Capacitive load derate by 20 %.

Parameter	Symbol	MB6S	Unit
Maximum instantaneous forward voltage drop per leg at 0.5A	VF	1.1	V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	IR	10 500	μA

Notes: (1)Thermal resistance from Junction to Ambient on P.C.board mounting.

(2)Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

Rating and Characteristic Curves ($T_A=25^\circ\text{C}$ Unless otherwise noted)
MB06S

Fig. 1 Derating Curve for Output Rectified Current

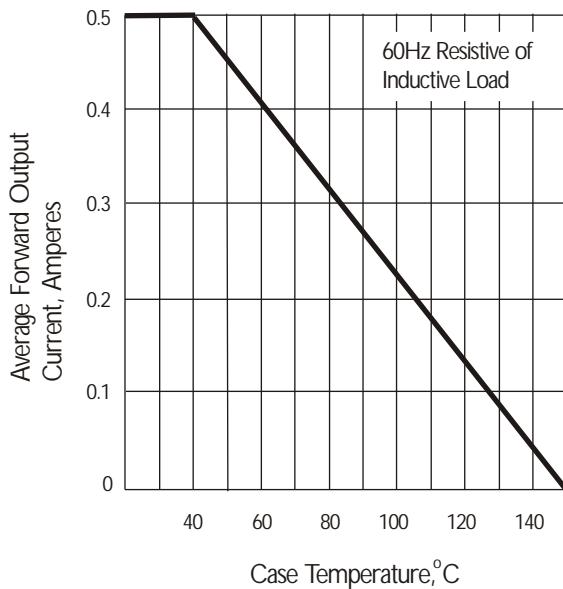


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

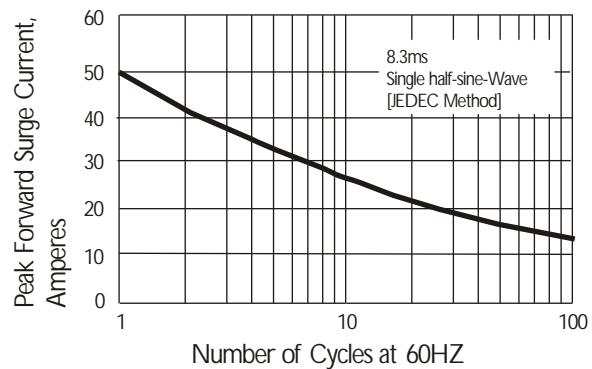


Fig. 3 Typical Instantaneous Forward Characteristics

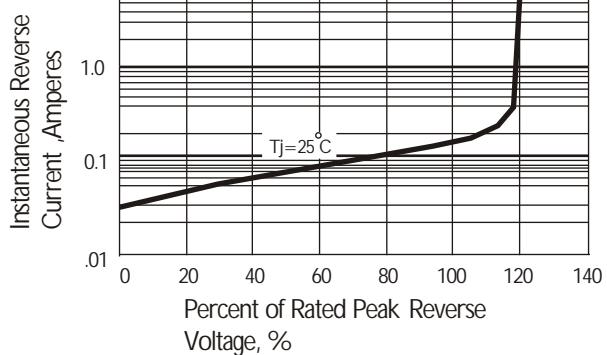
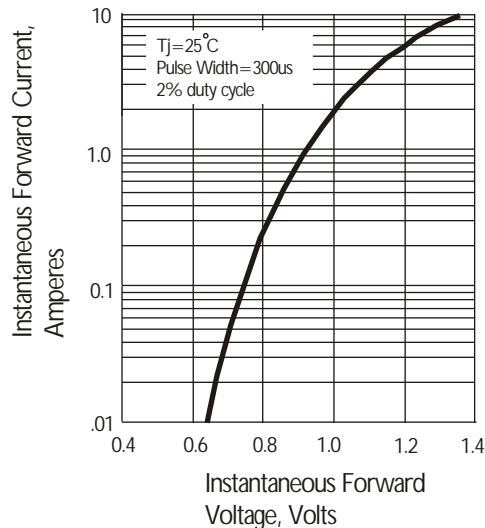


Fig. 5 Typical Junction Capacitance

