MSB40D THRU MSB40M

Voltage Range - 200 to 1000 Volts Current - 4.0 Ampere

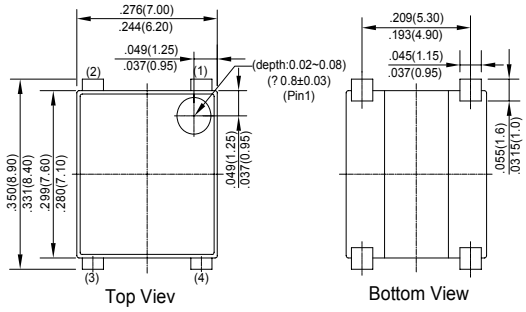
GLASS PASSIVATED SURFACE MOUNT BRIDGE RECTIFIERS

Features

UMSB

- Glass Passivated Chip Junction
- Reverse Voltage - 200 to 1000 V
- Forward Current- 4 A
- High Surge Current Capability

  Designed for Surface Mount Application



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC UMSB molded plastic body
Terminals : Solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.00825 ounce, 0.234 grams

Maximum Ratings And Electrical Characteristics

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

Parameter	Symbols	MSB40D	MSB40G	MSB40J	MSB40K	MSB40M	Units
Marking Code		MDD MB40D	MDD MB40G	MDD MB40J	MDD MB40K	MDD MB40M	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	4					A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	95					A
Maximum Forward Voltage at 4.0 A	V_F	1.1					V
Maximum DC Reverse Current @T_a=25 °C at Rated DC Blocking Voltage @T_a=125 °C	I_R	5 100					μA
Typical Junction Capacitance per element	C_j	50					pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	60 10 25					°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150					°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.
2. P.C.B. mounted with 4×1.5"×1.5" (3.81×3.81 cm) copper pad areas.

Typical Characterisitics

Fig.1 Average Rectified Output Current Derating Curve

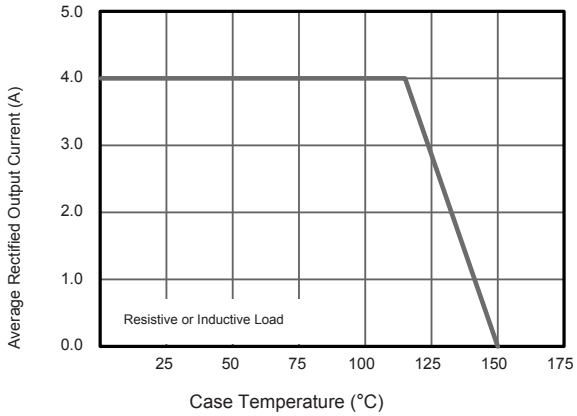


Fig.2 Typical Reverse Characteristics

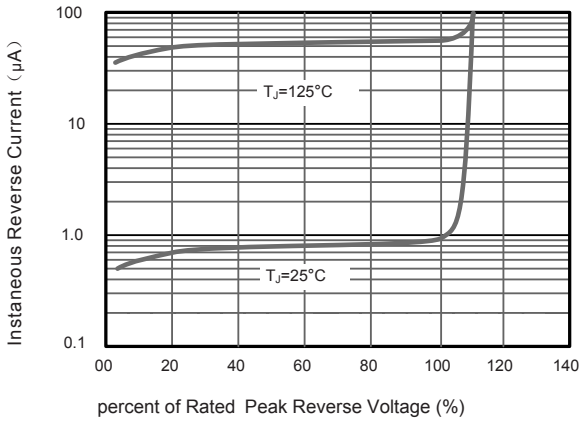


Fig.3 Typical Instaneous Forward Characteristics T_J=25°C

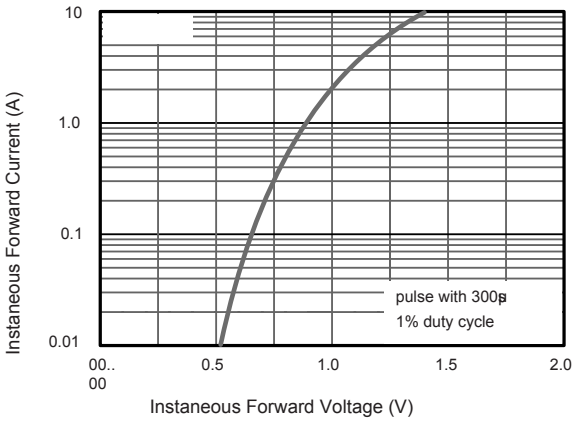


Fig.4 Typical Junction Capacitance

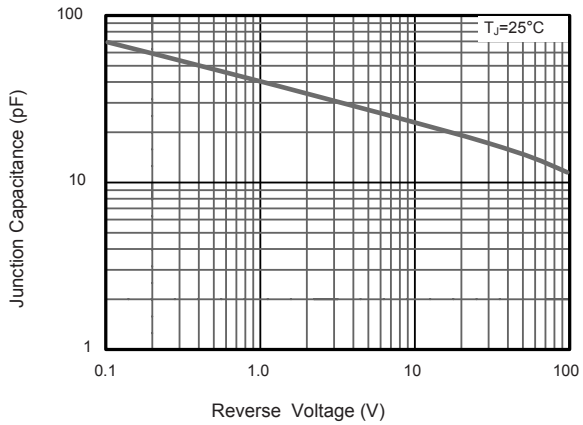


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

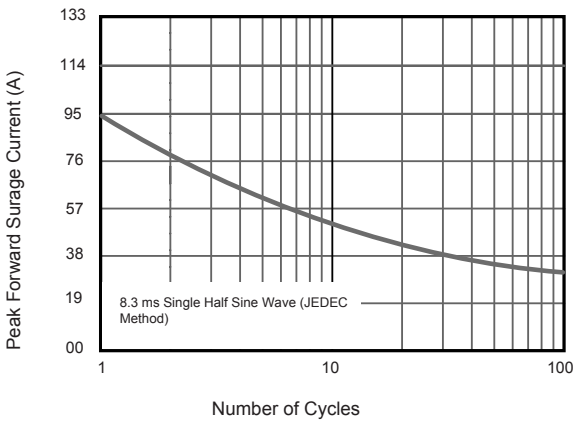
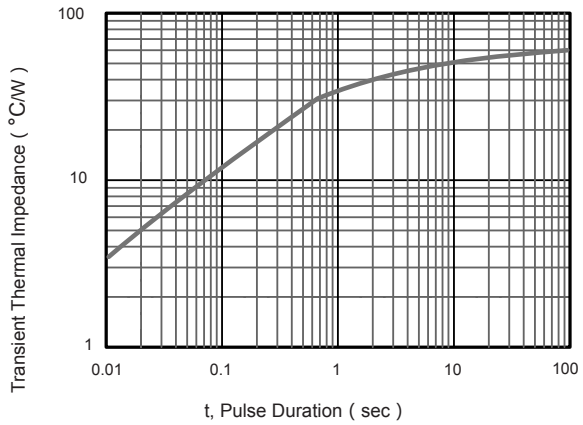


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.