

**Features**

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Idea for printed circuit board
- ◆ Metal-Silicon junction chip
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed  
250°C/10 seconds at terminals

**Mechanical Data**

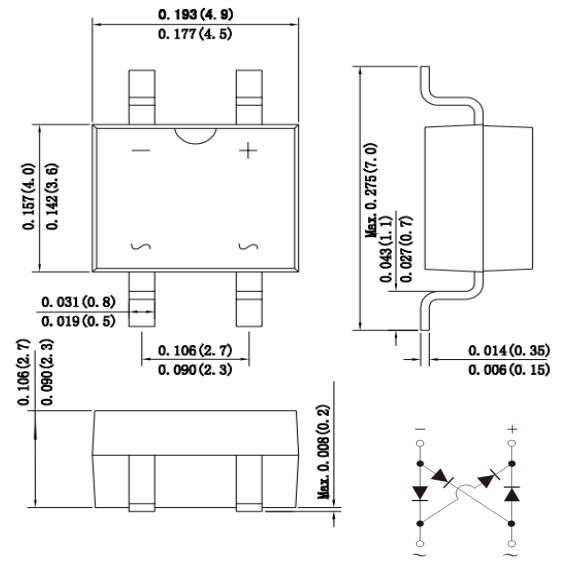
**Case :** Molded plastic body

**Terminals :** Solder plated, solderable per MIL-STD-750,Method 2026

**Polarity :** Polarity symbol marking on body

**Mounting Position :** Any

**Weight :** 0.004 ounce, 0.118 grams



Dimensions in inches and (millimeters)

**Maximum Ratings And Electrical Characteristics**

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

Parameter	SYMBOLS	KMB 12S	KMB 14S	KMB 16S	KMB 18S	KMB 110S	KMB 115S	KMB 120S	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	40	60	80	100	150	200	V
Maximum RMS voltage	V <sub>RMS</sub>	14	28	42	56	70	105	140	V
Maximum DC blocking voltage	V <sub>DC</sub>	20	40	60	80	100	150	200	V
Maximum average forward rectified current at T <sub>L</sub> =100°C On glass-epoxy P.C.B (Note 1)	I <sub>(AV)</sub>	1.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	30.0							A
Rating for fusing (t=8.3ms, T <sub>a</sub> =25°C)	I <sub>t</sub> <sup>2</sup>	3.7							A <sup>2</sup> <sub>s</sub>
Maximum instantaneous forward voltage at 1.0A	V <sub>F</sub>	0.55	0.7	0.85		0.95		V	
Maximum DC reverse current T <sub>A</sub> =25°C at rated DC blocking voltage T <sub>A</sub> =125°C	I <sub>R</sub>	0.5 50			0.2 20			mA	
Typical thermal resistance	R <sub>qJA</sub>	85.0							°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to +125			-55 to +150				°C
Storage temperature range	T <sub>STG</sub>	-55 to +150							°C

**Note:**1.Mounted on glass epoxy PC board with 1.3\*1.3mm solder pad

**Ratings And Characteristic Curves**

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

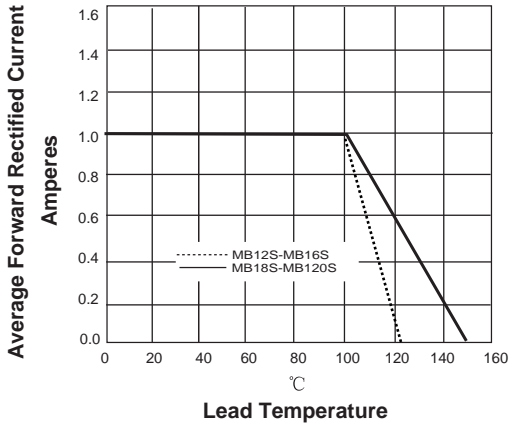


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

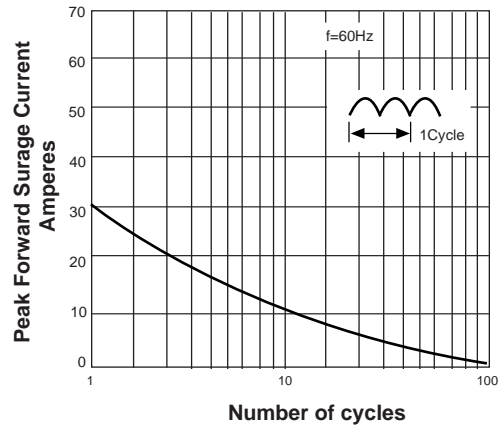


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

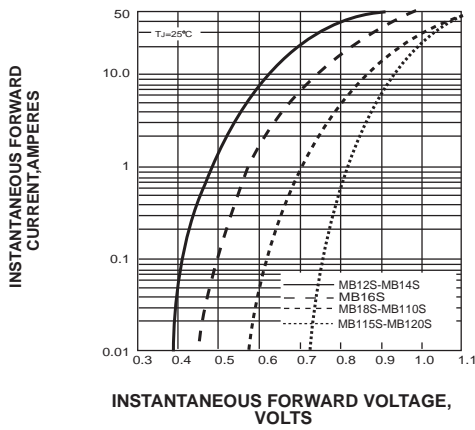
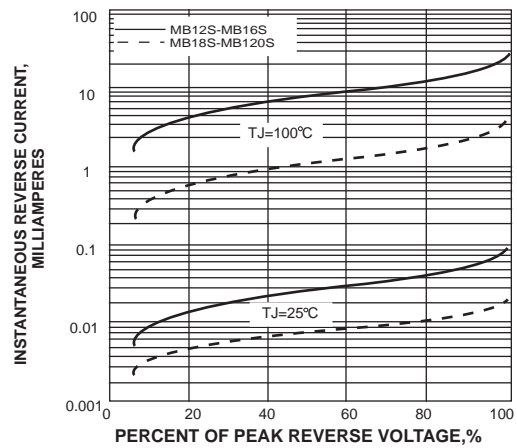
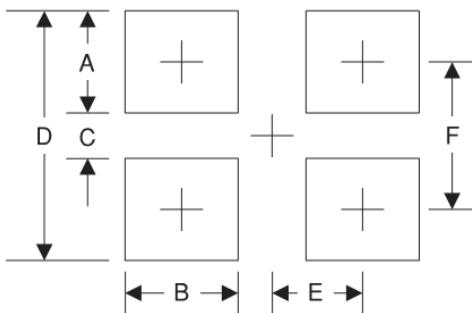


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

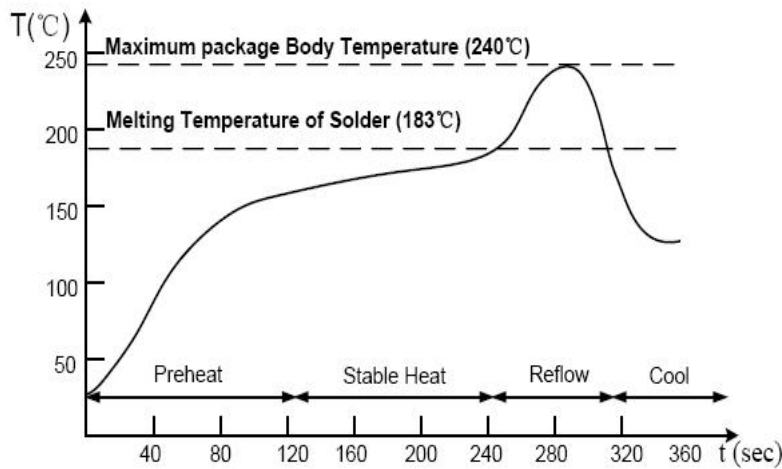


**Suggested Pad Layout**



Symbol	Unit (mm)	Unit (inch)
A	1.7	0.067
B	1.0	0.039
C	4.40	0.173
D	8.10	0.319
E	1.25	0.049
F	6.30	0.248

**Suggested Soldering Temperature Profile**

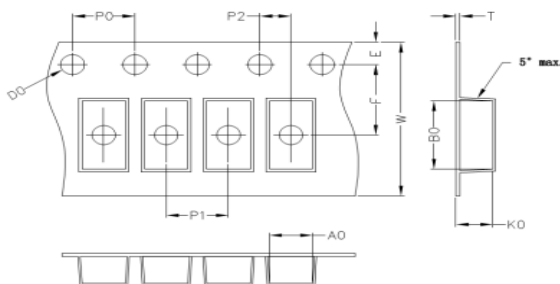


**Note**

- ◆ Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- ◆ The device can be exposed to a maximum temperature of 265°C for 10 seconds.
- ◆ Devices can be cleaned using standard industry methods and solvents.
- ◆ If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

**Package Information**

**Carrier Dimension(mm)**



<b>A0</b>	<b>B0</b>	<b>K0</b>	<b>D0</b>	<b>E</b>	<b>F</b>
5.10	7.20	2.88	1.55	1.75	5.50
<b>P0</b>	<b>P1</b>	<b>P2</b>	<b>T</b>	<b>W</b>	<b>Tolerance</b>
4.0	8.0	2.0	0.25	12	0.1

**Package Specifications**

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (Kpcs)	Box Size (mm)	QTY/Box (Kpcs)	Carton Size (mm)	Q'TY/Carton (Kpcs)
MBS	13'	330	3	338	6	365*365*360	48