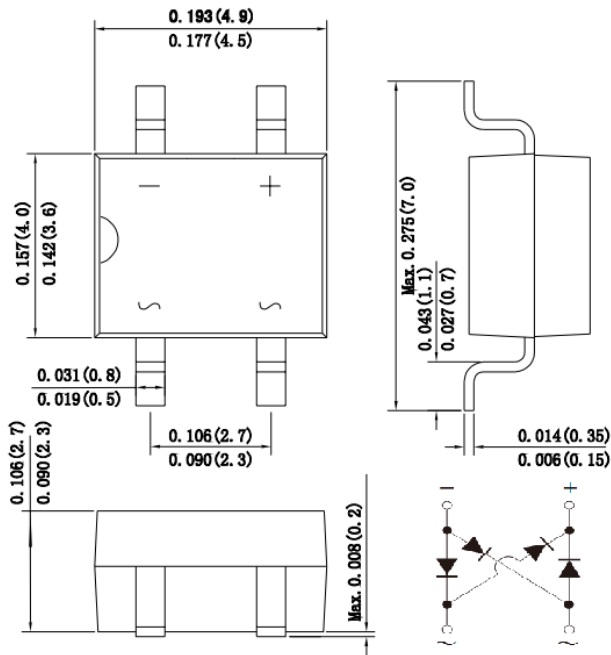




Dimensions in inches and (millimeters)

Features

- ▶ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ▶ Idea for printed circuit board
- ▶ Glass passivated 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

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	MB2SX	MB4SX	MB6SX	MB8SX	MB10SX	UNITS
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 at $T_L=100^\circ\text{C}$ On glass-epoxy P.C.B (Note 1)	$I_{(AV)}$	0.8					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0					A
Rating for fusing ($t=8.3\text{ms}$, $T_a=25^\circ\text{C}$)	I^2t	3.74					A^2s
Maximum instantaneous forward voltage at 0.8A	V_F	1.10					V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	I_R	5.0 500					μA
Typical junction capacitance (Note 2)	C_J	15.0					pF
Typical thermal resistance	R_{qJA}	85.0					$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J T_{STG}	-55 to +150					$^\circ\text{C}$

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

2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.



FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

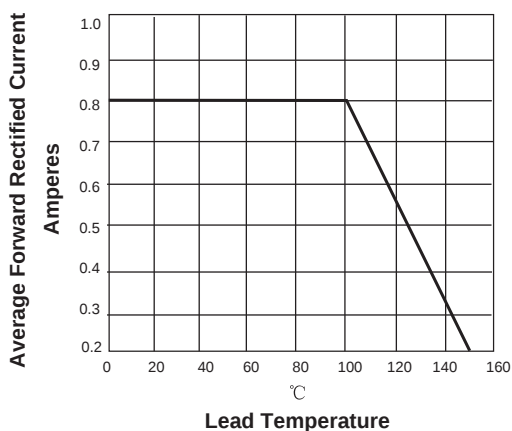


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

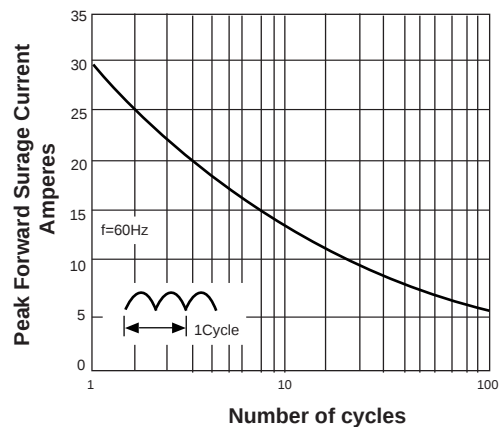


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

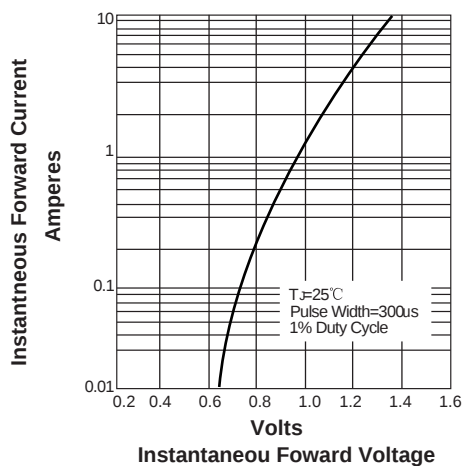
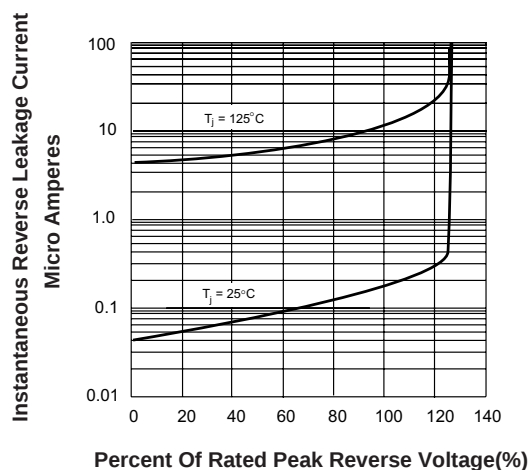
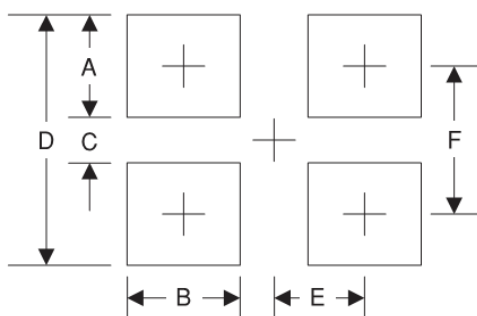


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Suggested Pad Layout

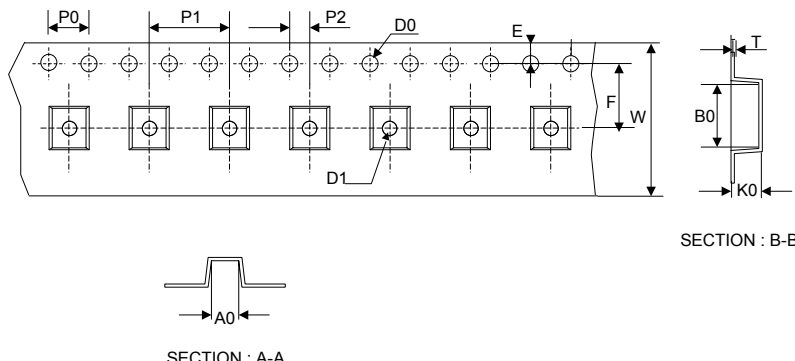
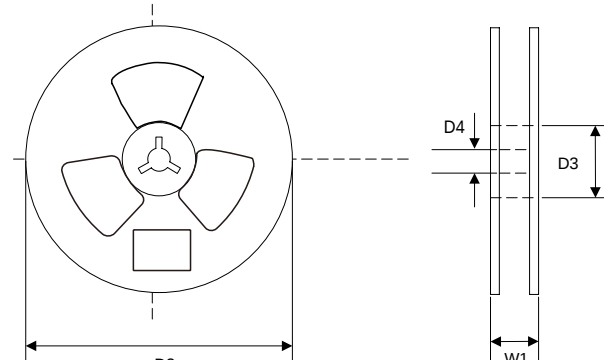


Symbol	Unit (mm)	Unit (inch)
A	1.7	0.067
B	1.0	0.039
C	4.40	0.173
D	8.10	0.319
E	1.25	0.049
F	6.30	0.248

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (pcs)
MBS	13'	330	3000



Packaging

Tape 	Symbol	Dimension (mm)
	P0	4.00±0.10
	P1	8.00±0.10
	P2	2.00±0.10
	D0	1.55±0.10
	D1	1.55±0.10
	E	1.75±0.10
	F	5.50±0.10
	W	12.00±0.10
	A0	5.00±0.10
	B0	7.20±0.10
	K0	2.90±0.10
	T	0.24±0.02
	D2	330.0±2.0
13" Reel 	D3	73Min.
	D4	14.0±0.5
	W1	12.0±2.0
	Quantity: 3000PCS	