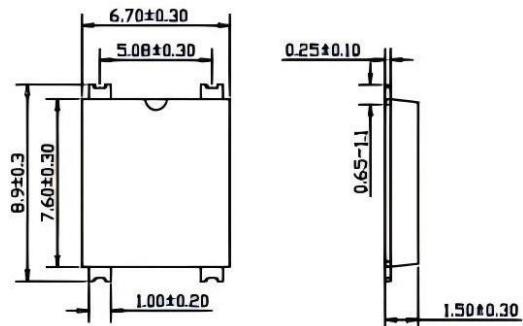


## Features

- ◆ 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 260°C/10 seconds at terminals

## MSB Package

## Mechanical Data

**Case :** Molded plastic body

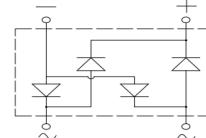
**Terminals :** Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity :** Polarity symbol marking on body

**Mounting Position :** Any



Dimensions in 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	MSB801	MSB802	MSB804	MSB806	MSB808	MSB810	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_L=100^\circ\text{C}$	$I_{(AV)}$	8.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	175.0						A
Rating for fusing ( $t=8.3\text{ms}$ , $T_a=25^\circ\text{C}$ )	$I^2t$	127						$\text{A}^2\text{s}$
Maximum instantaneous forward voltage at 4.0A	$V_F$	1.1						V
Maximum DC reverse current $T_a=25^\circ\text{C}$ at rated DC blocking voltage $T_a=125^\circ\text{C}$	$I_R$	2.0 200						$\mu\text{A}$
Typical junction capacitance (Note 1)	$C_J$	45.0						pF
Typical thermal resistance	$R_{QJA}$	55						$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150						$^\circ\text{C}$

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

## Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

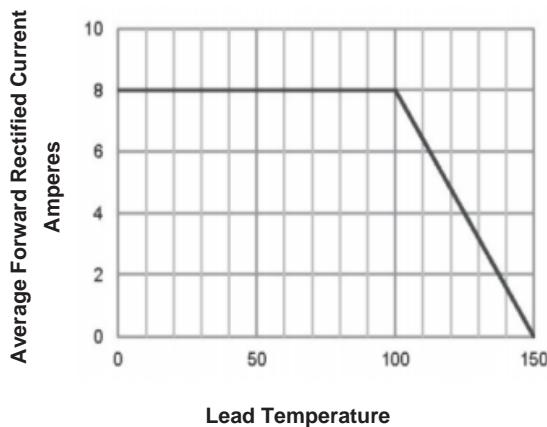


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

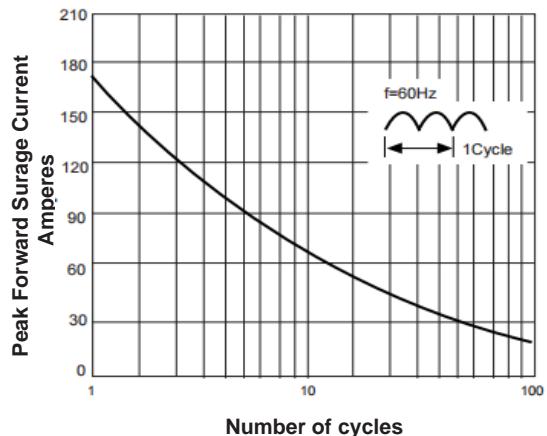


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

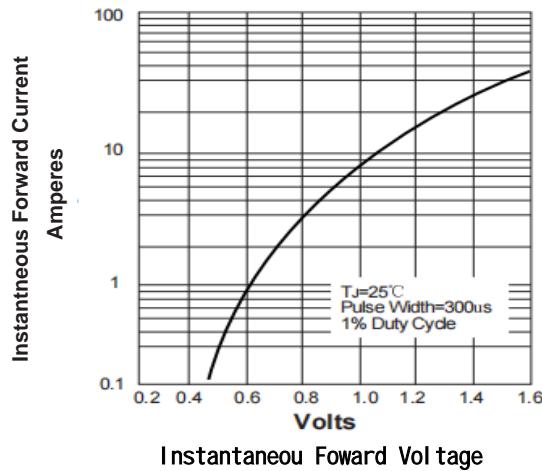
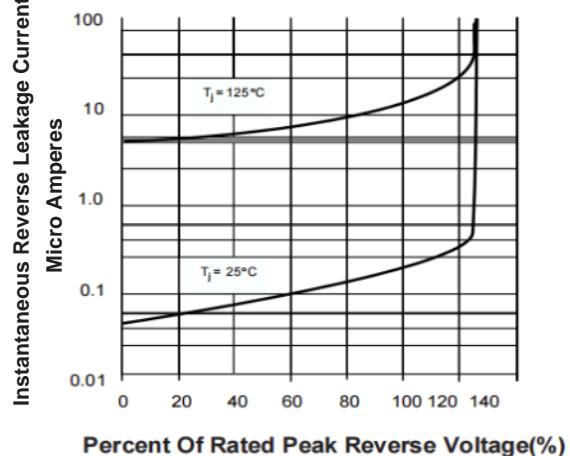
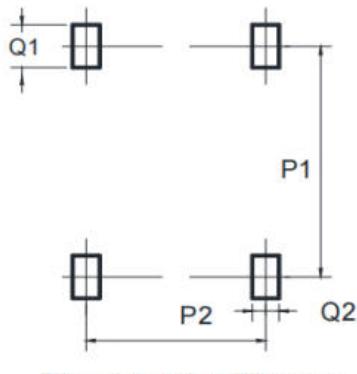


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

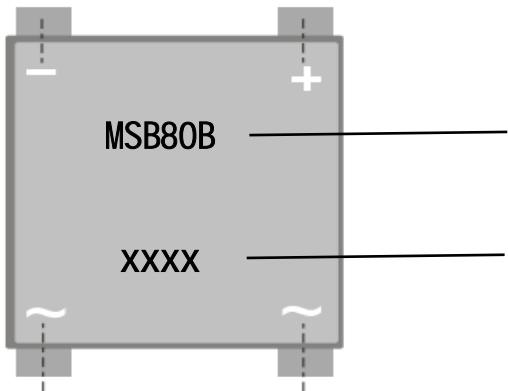


## MSB Suggested Pad Layout



Dimensions is millimeters

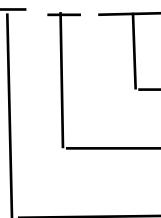
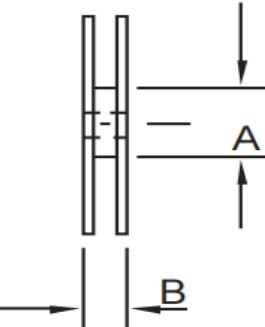
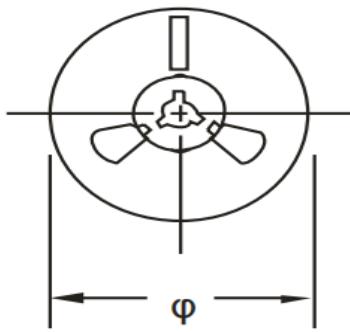
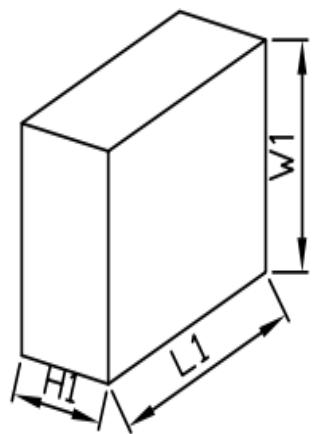
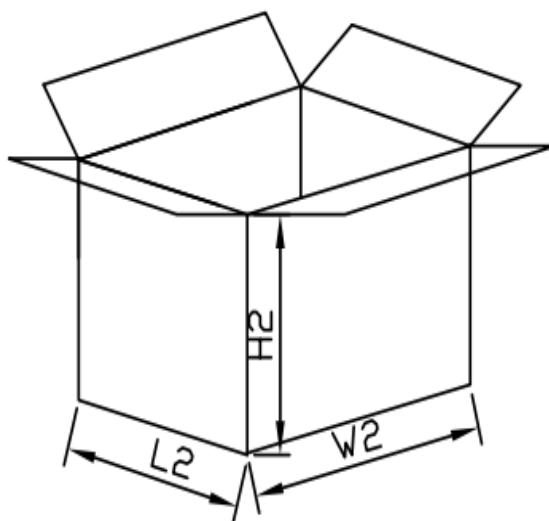
UNIT		P1	P2	Q1	Q2
mm	min	8.30	5.10	1.6	1.2
mil	min	326.77	200.79	63.0	47.25

**Marking Information**

Product model : MSB80B/D/G/J/K/M

**PDC information :**

X X X X

**Packaging Information****1. Reel Dimensions****2. Inside Box****3. Outside Box**

## Packaging Information

NO	UNIT	Reel Dimensions			Inside Box			Outside Box		
Size	mm	φ	A	B	L1	W1	H1	L2	W2	H2
		330	100	15	340	340	46	360	360	270
QTY	PCS	Smallest package,3000PCS/reel			6,000PCS,2 reel in total			30,000PCS/carton,5boxes in total		
Note	Tolerance $\leq 20\text{mm}, \pm 3\text{mm};$ $21-100\text{mm}, \pm 5\text{mm};$ $101-500\text{mm}, \pm 10\text{mm}$									