FrelTec

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82319 Starnberg
Germany

Bridge Rectifier
MBS

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68A		MB___xxxxx		MBSX		L03
Type		Type		Package		Packing
68A: Bridge Rectifier		MB___		MBS		L03: tape and Reel(embossed tape) for 3000 pc (13'reel)

All products according to RoHS (2015/863/EU)

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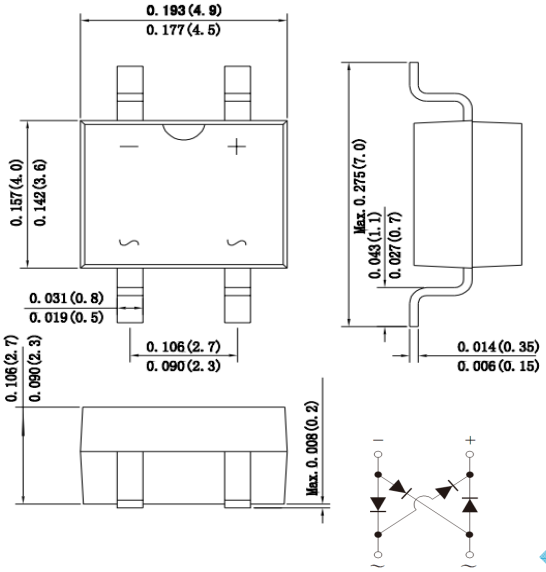
PACKAGE OUTLINE



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MBS

Bridge Rectifier

Maximum Ratings & Characteristics
Ratings at 25°C ambient temperature unless otherwise specified,

Parameter	SYMBOLS	MB05S	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at T_L =100 C On glass-epoxy P.C.B (Note 1)	$I_{(AV)}$	1,0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	35,0							A
Rating for fusing (t=8.3ms, Ta=25°C)	I^2t	5,08							A^2s
Maximum instantaneous forward voltage at 1.0A	V_F	1,0							V
Maximum DC reverse current T_A =25°C at rated DC blocking voltage T_A=125°C	I_R	2,0 200							u A
Typical junction capacitance (Note 2)	C_J	18,0							pF
Typical thermal resistance	R_{qJA}	72,0							∘ C/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							∘ 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.

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Characteristics(Typical)

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

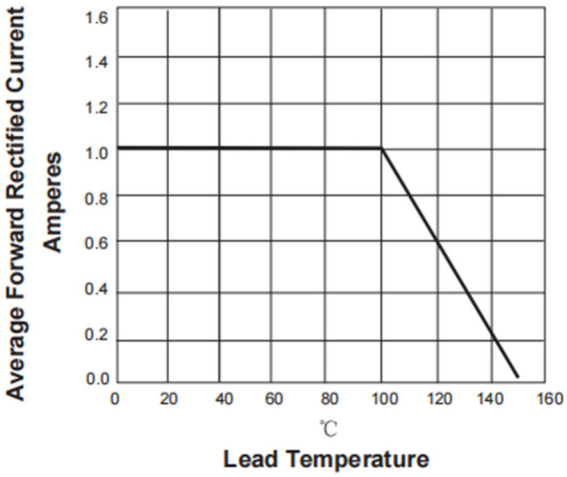


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

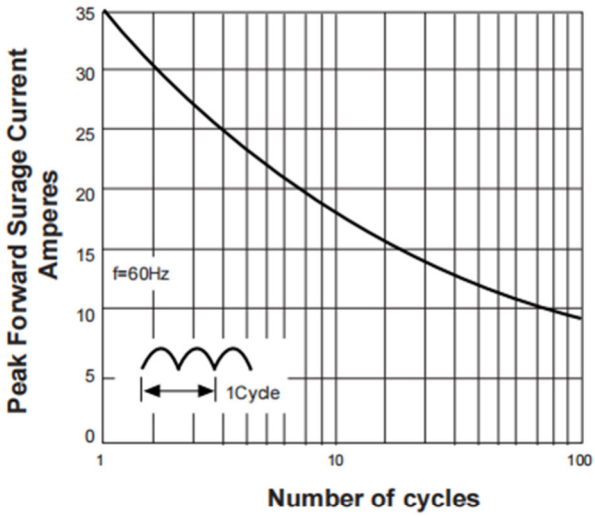


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

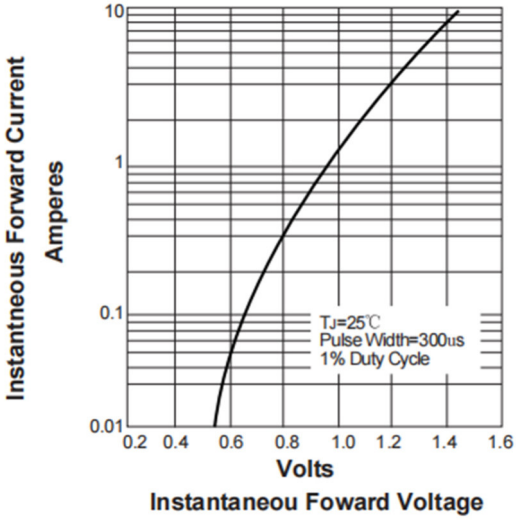
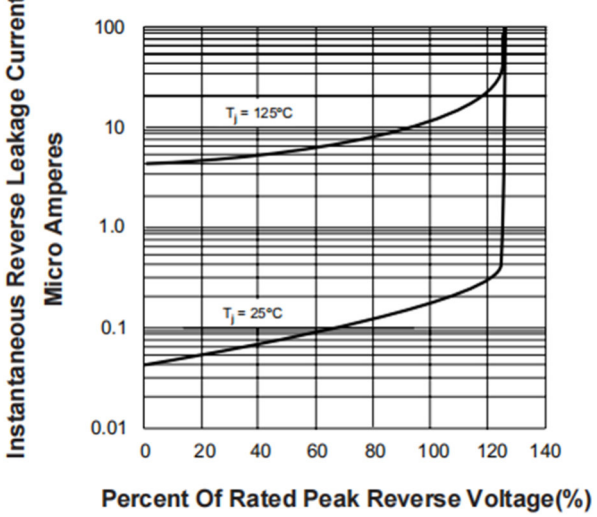


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



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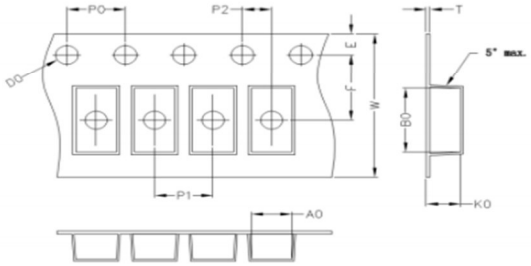
Package Information

Carrier Dimension(mm)



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

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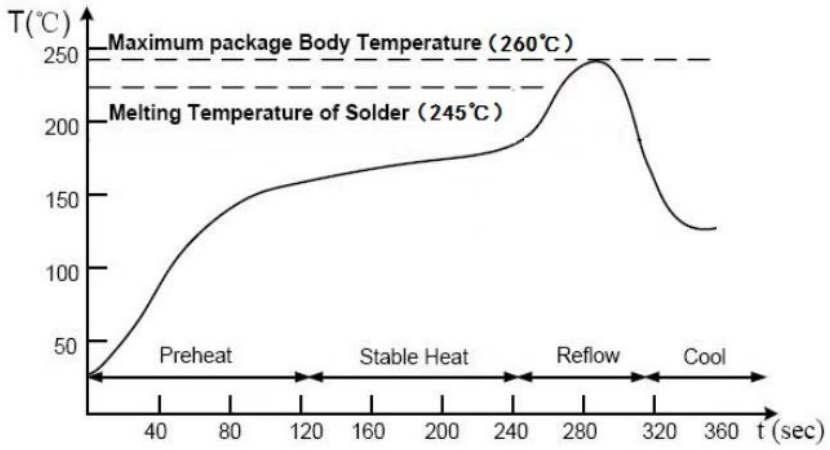
Lead Free Reflow Soldering Profile

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 260°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.

Fre

Stock period

The performance of these products, including the solderability, is guaranteed for 12 month, provided that they remain packed as they were when delivered and stored at a temperature of 0-35°C and a relative humidity 35-75%RH

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