

FrelTec

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82319 Starnberg
Germany

Bridge Rectifier
MBS

FrelTec

MBS

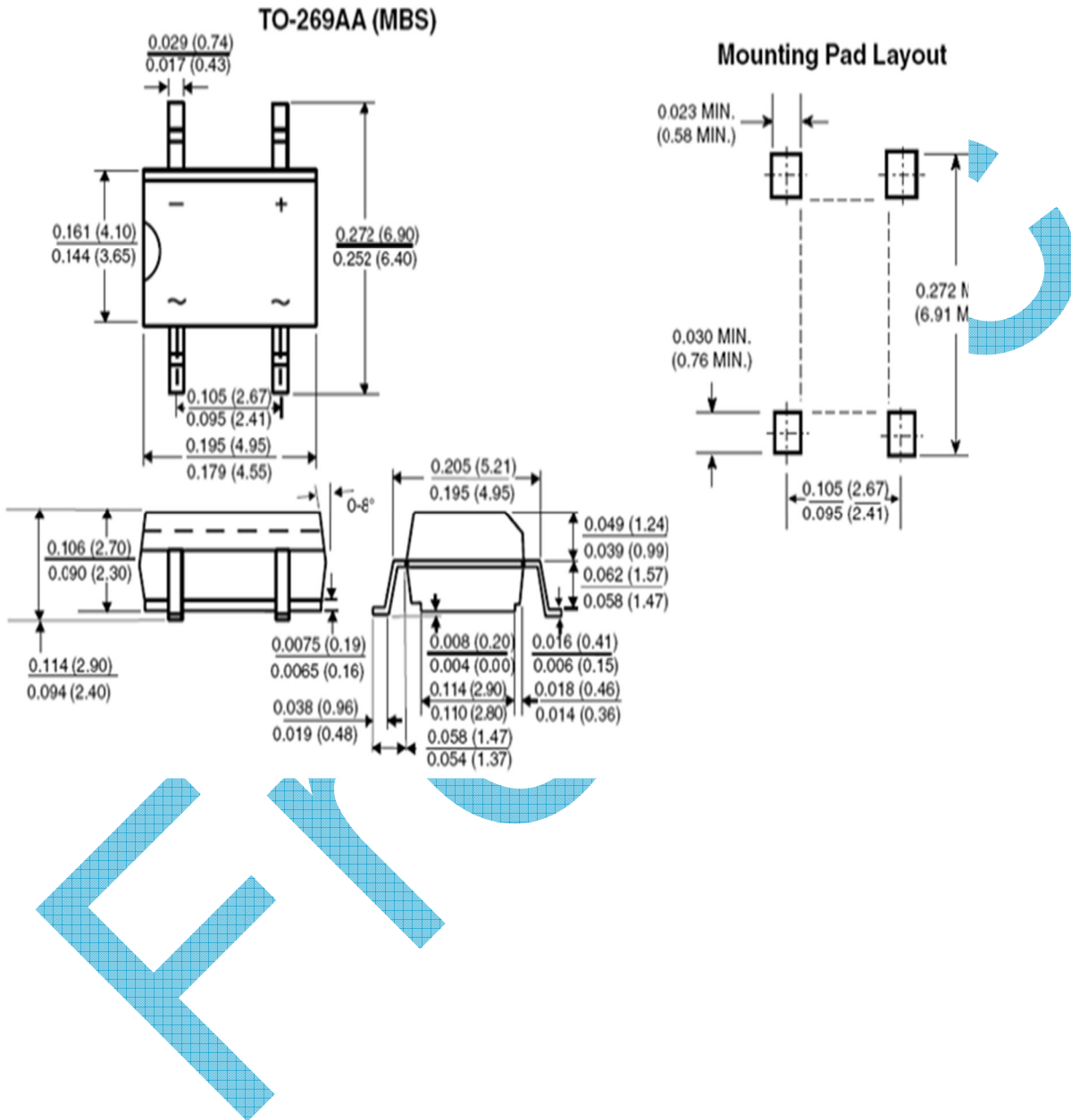
SPECIFICATION

68B	MB_Sxxxxx	MBSX	L0Y
Type	Type	Package	Packing
68B: Bridge Rectifier	MB_S	MBS	L0Y: tape and Reel(embossed tape) for 2500 pc (13'reel)

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

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PACKAGE OUTLINE



MBS

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

Parameter	Symbols	MB2S	MB4S	MB6S	MB8S	MB10S	Unit
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 output current (See Fig.1) on glass-epoxy P.C.B on aluminum substrate	$I_{F(AV)}$	0,5 ⁽¹⁾ 0,8 ⁽²⁾					A
Peak forward surge current 8,3 MS singlehalf sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	35					A
Rating for fusig (t<8,3ms)	I^2t	5					A ² sec
Maximum instantaneous forward voltage drop per leg at 0,4A	V_F	1,0					V
Maximum DC reverse current at TA =25°C Rated DC blocking voltage per leg TA =125°C	I_R	5 100					μA
Typical thermal resistance per leg	$R_{\theta JA}$ $R_{\theta JA}$ $R_{\theta JL}$	85 ⁽¹⁾ 70 ⁽²⁾ 20 ⁽¹⁾					°C/W
Typical junction capacitance per at 4,0V. 1,0MHZ	C_j	13					pF
Operating junction and storage temperature range	T_j , T_{STG}	-55 to +150					°C

Note:

- 1) On glass epoxy P.C.B. mounted on 0,05"(1,3x1,3mm) pads
- 2) On aluminum substrate P.C.B. with an area of 0,8x0,8"(20x20mm) mounted on 0,05x0,05"(1,3x1,3mm) solder pad

MBS

Characteristics(Typical)

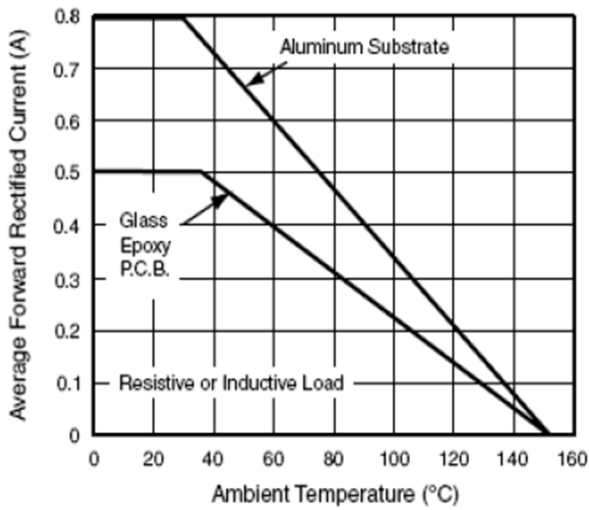


Figure 1. Derating Curve for Output Rectified Current

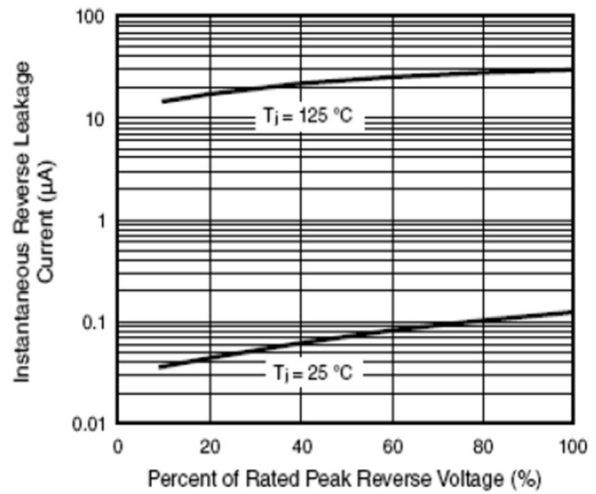


Figure 4. Typical Reverse Leakage Characteristics Per Leg

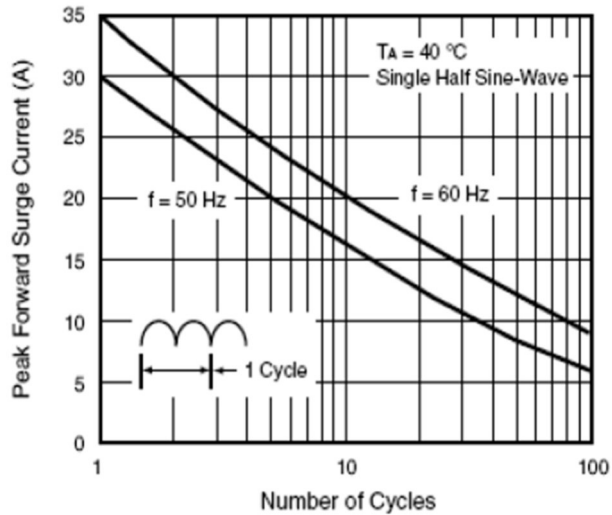


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

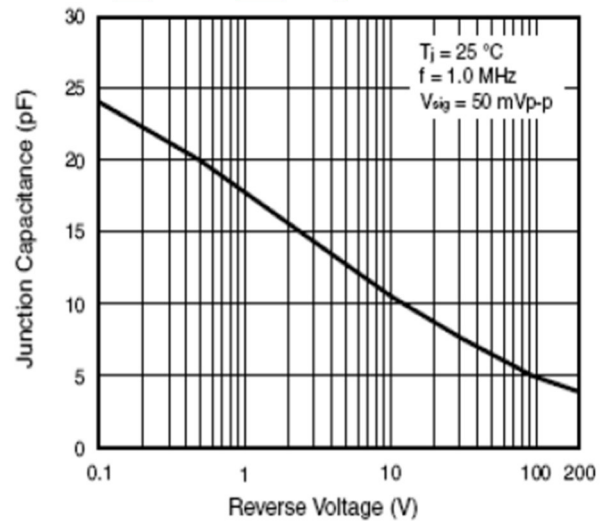


Figure 5. Typical Junction Capacitance Per Leg

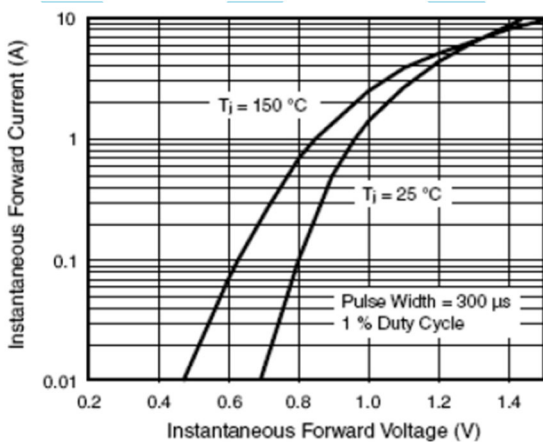
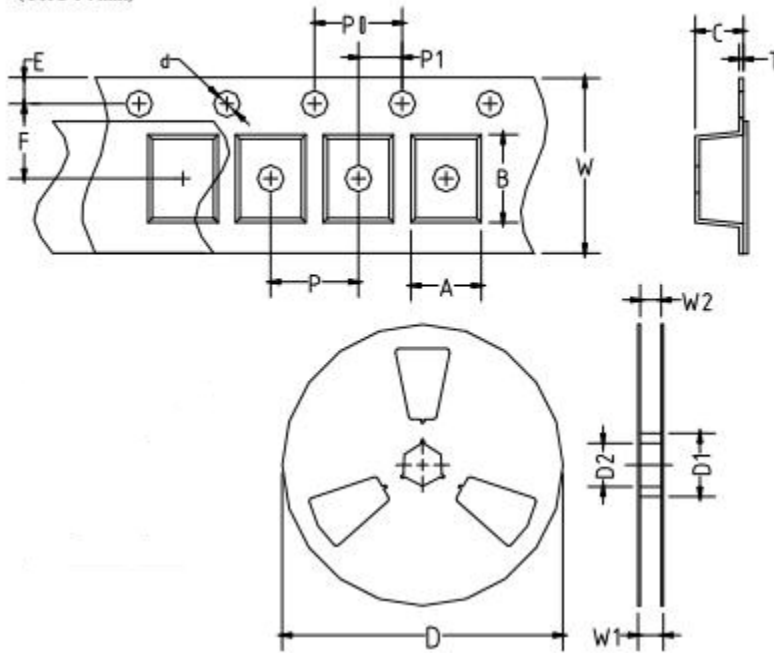
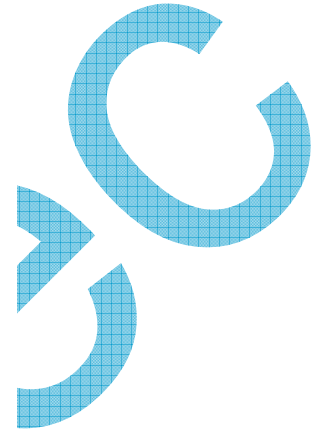


Figure 3. Typical Forward Voltage Characteristics Per Leg

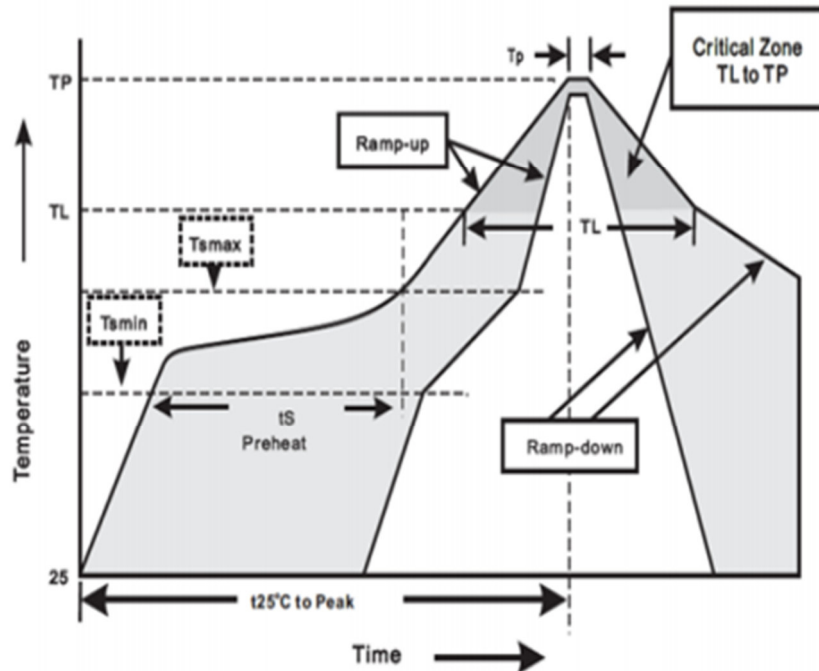
Size (Unit:mm)



Item	Symbol	MBS
Carrier width	A	3.77±0.10
Carrier length	B	5.70±0.10
Carrier depth	C	2.45±0.10
Sprocket hole	d	1.50±0.10
Reel outside diameter	D	330.0±1.0
Reel inner diameter	D1	75±1.0
Feed hole diameter	D2	13.5±1.0
Sprocket hole position	E	1.75±0.10
Punch hole position	F	5.50±0.05
Punch hole pitch	P	8.00±0.10
Sprocket hole pitch	P0	4.00±0.10
Embossment center	P1	2.00±0.10
Total tape thickness	T	0.25±0.10
Tape width	W	12.00±0.15
Reel width	W1	18.1±1.5
Reel width	W2	13.5±1.0



Soldering Parameters



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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 20-30°C and a relative humidity 20-60%RH

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