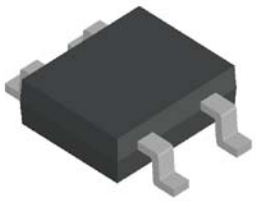
MB05F-S thru MB10F-S

Surface mount bridge rectifiers

Features

- Glass passivated die construction
- Low forward voltage drop
- High surge current capability
- Desgned for surface mount application
- Component in accordance to RoHS 2011/65/EU



MBF-S

RoHS COMPLIANT

Mechanical Date

- **Case:**MBF-S
  Molding compound meets UL 94 V-0 flammability rating
- **Terminals:** Solder plated, solderable per MIL-STD-750， Method 2026
- **Polarity:** Polarity symbols marked on body
- **Marking:** type number

Major Ratings and Characteristics

$I_{F(AV)}$	**0.5A,0.8A**
V_{RRM}	**50V to 1000V**
I_{FSM}	**30A**
I_R	**5.0μA**
V_F	**1.0V**
T_j**max.**	**150℃**

Maximum Ratings & Thermal Characteristics (T_A = 25 °C unless otherwise noted)

Items	Symbol	MB 05F-S	MB 1F-S	MB 2F-S	MB 4F-S	MB 6F-S	MB 8F-S	MB 10F-S	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS reverse 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_A(see Fig1.) -on glass-epoxy P.C.B[1] -on aluminum substrate[2]	$I_{F(AV)}$	0.5 0.8							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30							A
Thermal resistance from junction to ambient	$R_{\theta JA}$[1]	85							°C/W
Thermal resistance from junction to lead	$R_{\theta JL}$[1]	20							
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150							℃

Note：1.On glass epoxy P.C.B. mounted on 0.05x0.05" (1.3mmx1.3mm) pads

2.On aluminum substrate P.C.B. with mounted on 0.05×0.05"(1.3×1.3mm) solder pad

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Electrical Characteristics (T_A = 25 °C unless otherwise noted)

Items	Test conditions	Symbol	Min	Type	Max	Unit
Forward voltage per element	I_F=0.5A	V_F	-	-	1.0	V
Peak reverse current at rated DC blocking voltage	T_A=25°C	I_R	-	-	5.0	μA
	T_A=125°C				500	

Characteristic Curves (T_A=25 ℃ unless otherwise noted)

Fig.1 Output Current Derating Curve

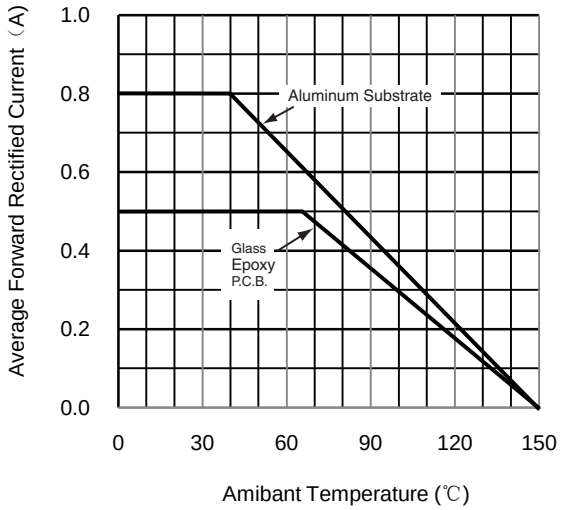


Fig.2 Maximum Peak Forward Surge Current(per leg)

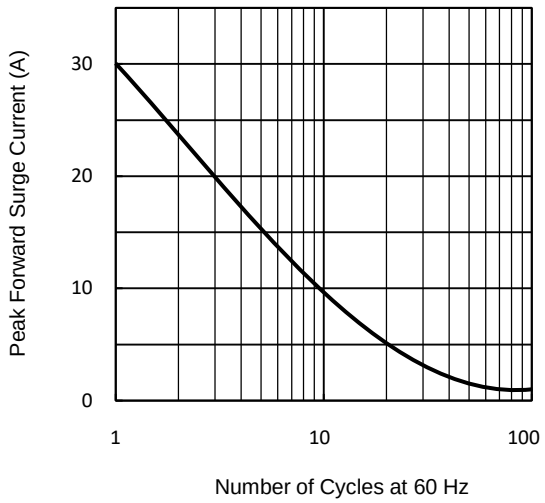


Fig.3 Typical Forward Characteristics（per leg)

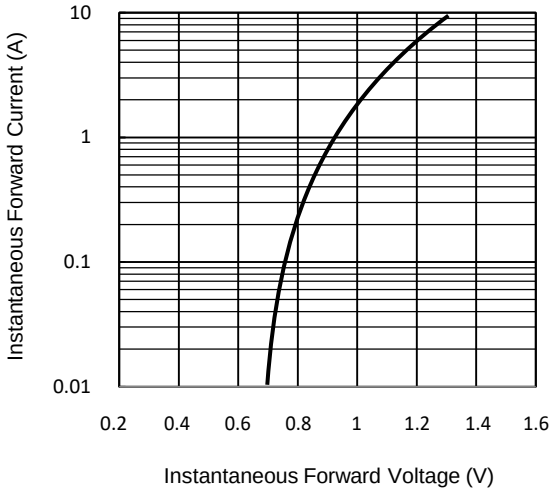
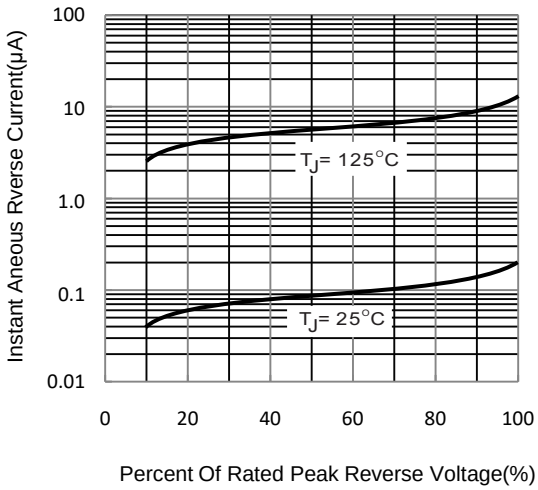


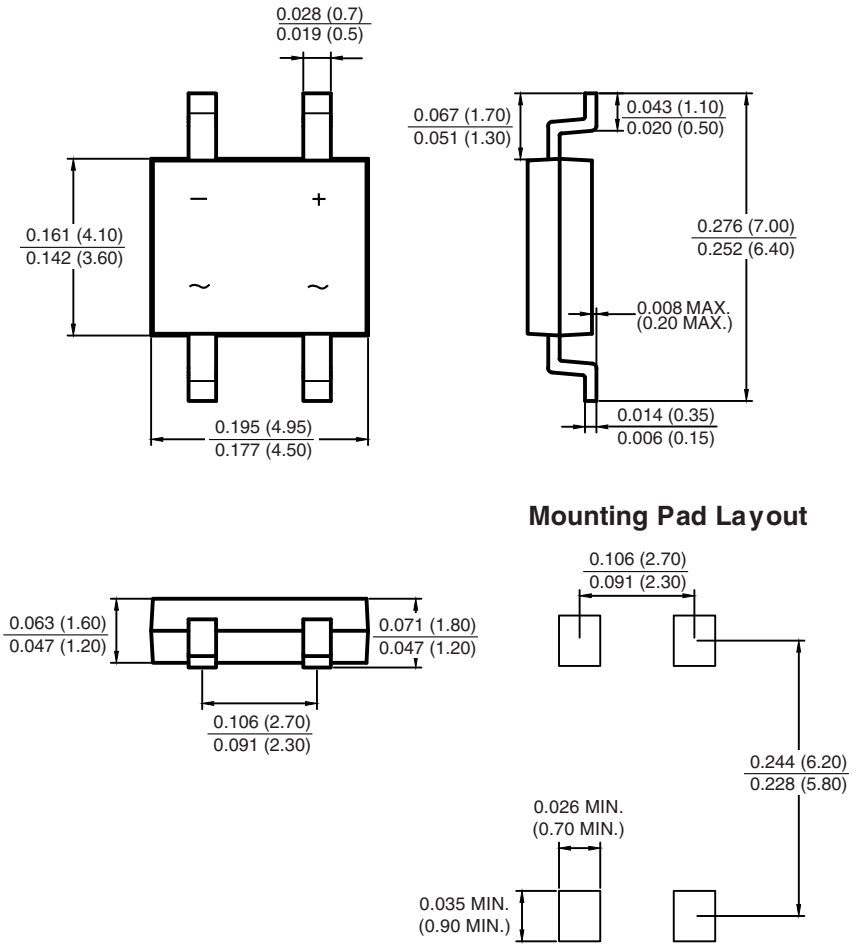
Fig.4 Typical Reverse Characteristics



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Package Outline

MBF-S



Dimensions in inches and (millimeters)

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Email: sale1@leiditech.com
Tel : +86- 021 50828806
Fax : +86- 021 50477059

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