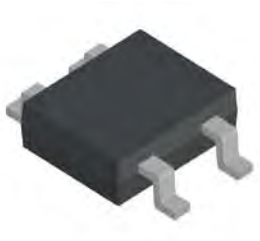
KMB12F-S thru KMB120F-S

Surface Mount Schottky Bridge Rectifiers

Features

- Low profile package
- Ideal for automated placement
- Low forward voltage drop
- Low power losses, high efficiency
- High forward surge capability
- High temperature soldering：
  260℃/10 seconds at terminals
- 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

$I_{F(AV)}$	1.0A
V_{RRM}	20V to 200V
I_{FSM}	30A
V_F	0.50V,0.55V,0.70V,0.85V，0.95V
$T_J$max.	125℃,150℃

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

Items	Symbol	KMB 12F-S	KMB 14F-S	KMB 15F-S	KMB 16F-S	KMB 18F-S	KMB 110F-S	KMB 115F-S	KMB 120F-S	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	50	60	80	100	150	200	V
Maximum RMS reverse voltage	V_{RMS}	14	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	40	50	60	80	100	150	200	V
Maximum average forward output rectified current at T_L (see Fig1.)	$I_{F(AV)}$	1.0								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 per leg	$R_{\theta JA}$(1)	70								°C/W
Thermal resistance from junction to lead per leg	$R_{\theta JL}$(1)	20								
Operating junction temperature range	T_J	-55 to +125				-55 to +150				℃
Storage temperature range	T_{STG}	-55 to +150								

Note:1.Mounted on 0.5x0.5" (13mmx13mm) pads

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

Items	Test conditions		Symbol	KMB12F-S	KMB14F-S	KMB15F-S ~ KMB16F-S	KMB18F-S ~ KMB110F-S	KMB115F-S ~ KMB120F-S	Unit
Instantaneous forward voltage per leg	I_F=1.0A (2)		V_F	0.50	0.55	0.70	0.85	0.95	V
Reverse current per leg	V_R=V_{DC}	T_J=25°C	I_R	0.5					mA
		T_J=100°C		20					

Note:2.Pulse test:300μs pulse width,1% duty cycle.

Characteristic Curves (T_A=25 ℃ unless otherwise noted)

Fig.1 Output Current Derating Curve

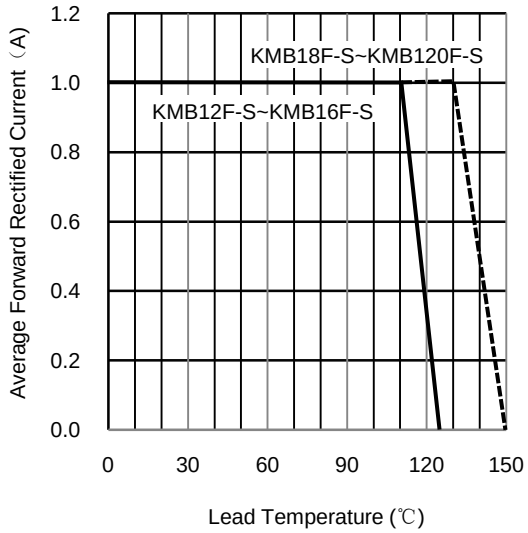


Fig.2 Maximum Peak Forward Surge Current(per leg)

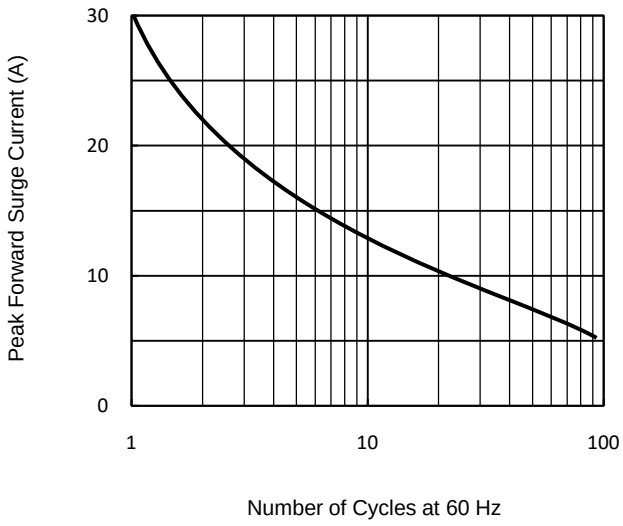


Fig.3 Typical Forward Characteristics（per leg)

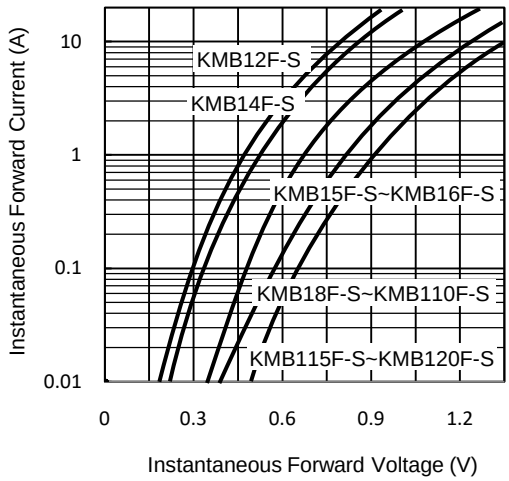
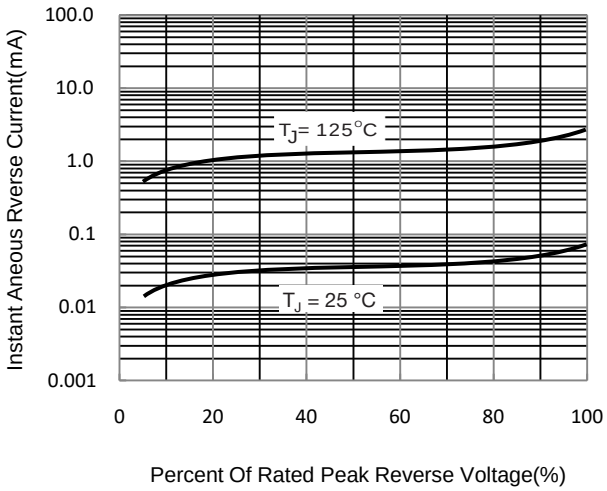


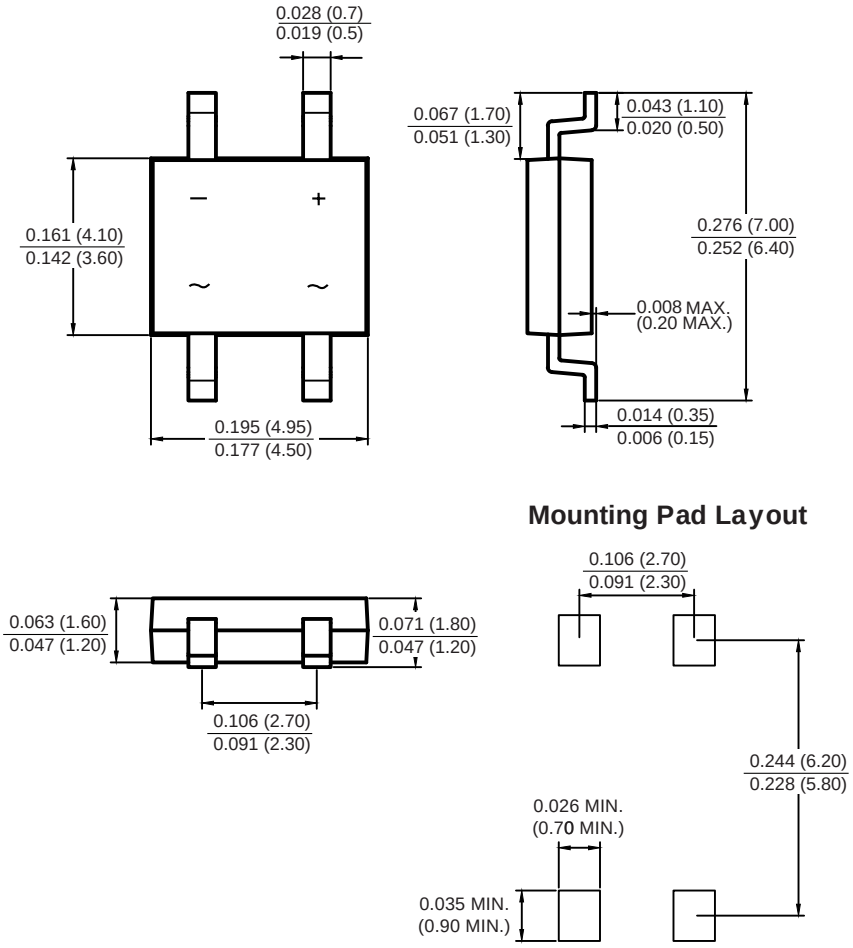
Fig.4 Typical Reverse Characteristics



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Package Outline

MBF-S



Dimensions in inches and (millimeters)

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Fax : +86- 021 50477059

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