MAB46

Product profile

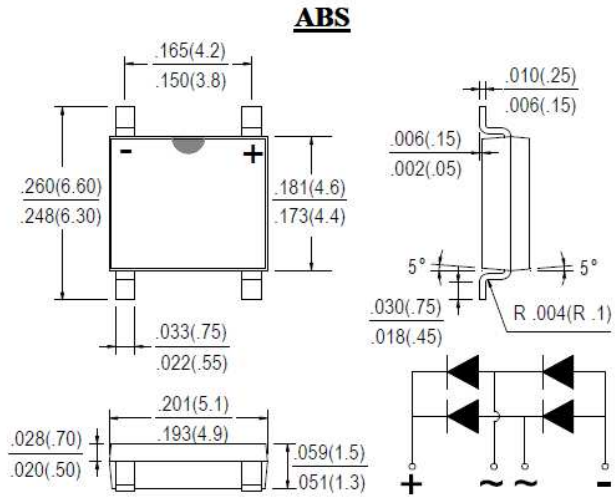
Single Phase Ultra Low VF Schottky Bridge Rectifier

General description

Schottky Rectifiers 4 Amp 60V

Features

- Ideal for printed circuit board.
- High current capability
- Reliable low cost construction utilizing molded plastic technique.
- Low forward voltage drop
- Low power loss, high efficiency
- High surge current capability
- High temperature soldering guaranteed 260°C /10sec/0.375" lead length at 5 lbs tension
- Small size, simple installation.



Dimensions in inches and (millimeters)

Mechanical data

Case: Molded plastic

Epoxy: UL 94V-0 rate flame retardant

Lead: MIL-STD- 202E, Method 208 guaranteed

Polarity: As marked

Maximum Ratings (Tc=25°C unless otherwise noted)			
Parameter	**Symbol**	**MAB46**	**Unit**
Maximum repetitive peak reverse voltage	VRRM	60	V
RMS Voltage (Max.)	VRMS	50	V
Working peak reverse voltage	VRWM	60	V
Maximum average forward rectified current Total Device	IF(AV)	4	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	60	A
Operating junction temperature range	TJ	-55 to +150	°C
Storage temperature range	TSTG	-55 to +150	°C

THERMAL CHARACTERISTICS			
Parameter	**Symbol**	**Value**	**Unit**
Typical thermal resistance	RθJA	75	°C/W

Notes:

(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

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Electrical characteristics (Tc=25°C unless otherwise noted)

OFF CHARACTERISTICS

Parameter	Symbol	Value		Unit
		Typical	Max	
Instantaneous forward voltage				
at IF=4A, Tj=25°C	VF	0.60	0.66	V
at IF=4A, Tj=125°C		0.56	0.61	
Maximum reverse current Tj=25°C	IR	200		u'A
at working peak reverse voltage Tj=125°C		50		m'A
Junction Capacitance @ DC 5V	CJ	205		pF

DEVICE MARK

MAB46

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■ Characteristic Curves

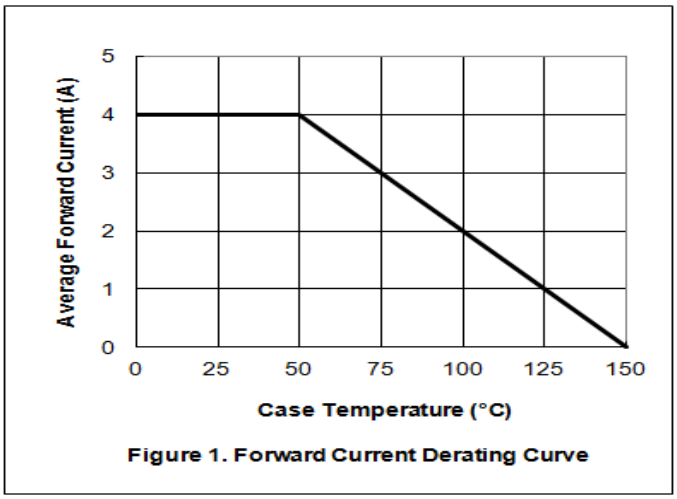

Figure 1. Forward Current Derating Curve

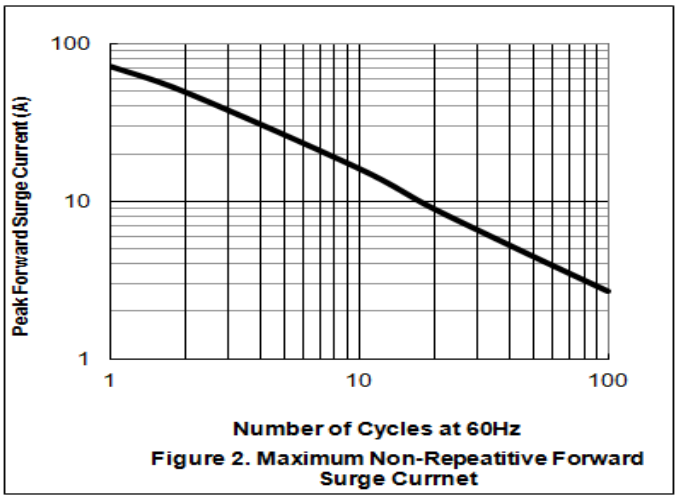

Figure 2. Maximum Non-Repeatitive Forward Surge Currnet

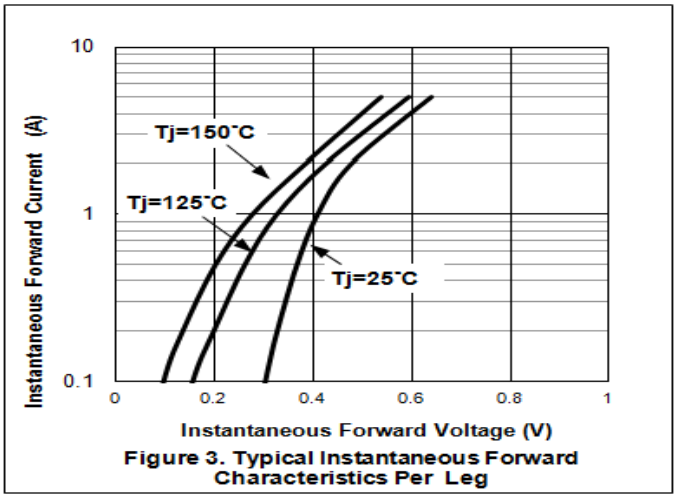

Figure 3. Typical Instantaneous Forward Characteristics Per Leg

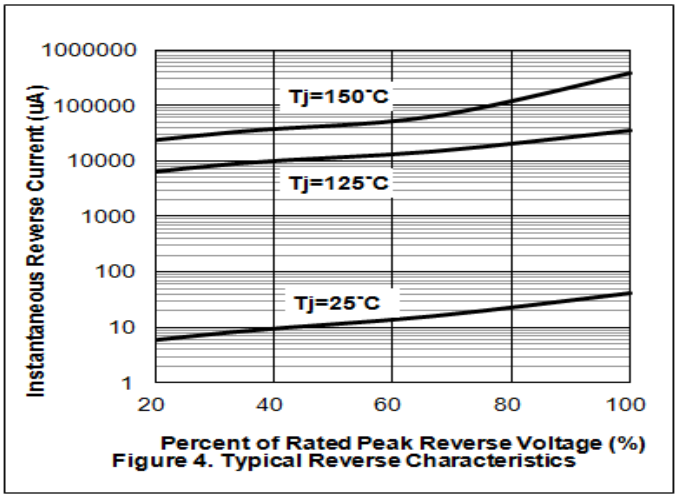

Figure 4. Typical Reverse Characteristics

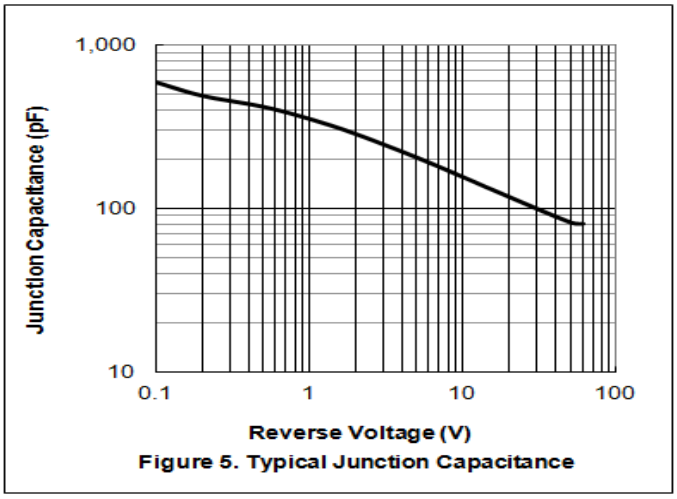

Figure 5. Typical Junction Capacitance

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