

# Silicon Diode

## **FEPB6AT**

Fast Efficient Rectifier

50V / 6A

# DATASHEET

from

[www.web-bcs.com](http://www.web-bcs.com)

OEM – General Semiconductor

Source: General Semiconductor Databook 1998

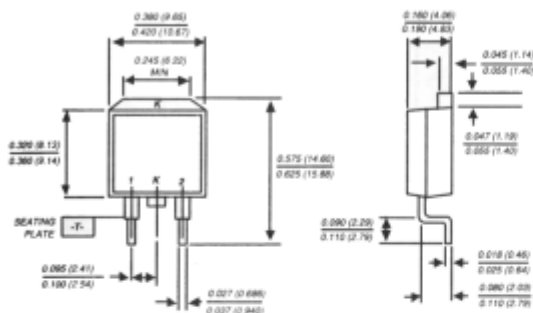
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# FEPB6AT THRU FEPB6DT

## FAST EFFICIENT PLASTIC RECTIFIER

Reverse Voltage - 50 to 200 Volts Forward Current - 6.0 Amperes

### TO-263AB



Dimensions are in inches and (millimeters)

### FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Dual rectifier construction, positive center-tap
- ◆ Glass passivated chip junctions
- ◆ Superfast recovery times for high efficiency
- ◆ Low power loss
- ◆ Low forward voltage, high current capability
- ◆ For use in low voltage, high frequency inverters, free wheeling and polarity protection applications
- ◆ High temperature soldering in accordance with CECC 802 / Reflow guaranteed



### MECHANICAL DATA

**Case:** JEDEC TO-263AB molded plastic body  
**Terminals:** Plated lead solderable per MIL-STD-750, Method 2026  
**Polarity:** As marked  
**Mounting Position:** Any  
**Weight:** 0.08 ounce, 2.24 grams

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	FEPB6AT	FEPB6BT	FEPB6CT	FEPB6DT	UNITS
Maximum repetitive peak reverse voltage	VRRM	50	100	150	200	Volts
Maximum RMS voltage	VRMS	35	70	105	140	Volts
Maximum DC blocking voltage	VDC	50	100	150	200	Volts
Maximum average forward rectified current TC=100°C	IAV	6.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	100.0				Amps
Maximum instantaneous forward voltage per leg at 3.0A	VF	0.975				Volts
Maximum DC reverse current at rated DC blocking voltage	IR	5.0 50.0				µA
Maximum reverse recovery time per leg (NOTE 1)	trr	35.0				ns
Typical thermal resistance (NOTE 2)	RθJC	3.6				°C/W
Typical junction capacitance per leg (NOTE 3)	CJ	28.0				pF
Operating junction and storage temperature range	TJ, TSTG	-55 to +150				°C

**NOTES:**

- (1) Reverse recovery test conditions: Ir=0.5A, I=1.0A, I=0.25A
- (2) Thermal resistance from junction to case per leg mounted on heatsink
- (3) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

**RATINGS AND CHARACTERISTICS CURVES FEPB6AT THRU FEPB6DT**

