

# Silicon Diode

## **FEPB16JT**

Fast Efficient Rectifier

600V / 16A

# DATASHEET

from

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

OEM – General Semiconductor

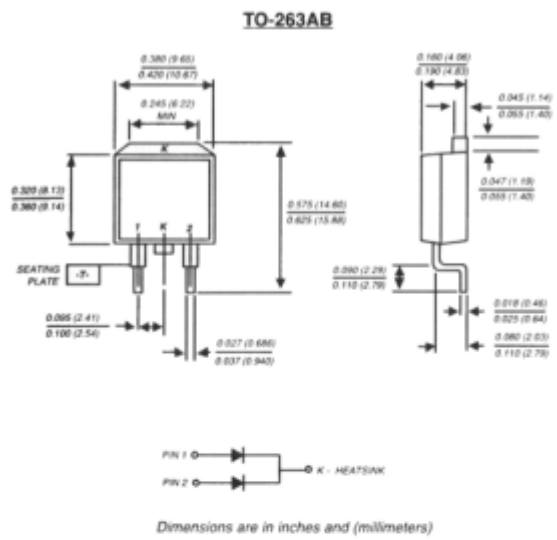
Source: General Semiconductor Databook 1998

**NEW PRODUCT                      NEW PRODUCT                      NEW PRODUCT**  


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**FEPB16AT THRU FEPB16JT**  
**FAST EFFICIENT PLASTIC RECTIFIER**  
**Reverse Voltage - 50 to 600 Volts      Forward Current - 16.0 Amperes**


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- FEATURES**
- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
  - ◆ Dual rectifier construction, positive centertap
  - ◆ Glass passivated chip junctions
  - ◆ Low power loss
  - ◆ Low forward voltage, high current capability
  - ◆ High surge current capability
  - ◆ Superfast recovery times for high efficiency
  - ◆ High temperature soldering in accordance with CECC 802 / Reflow guaranteed



**MECHANICAL DATA**

**Case:** JEDEC TO-263AB molded plastic body  
**Terminals:** Plated leads 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	FEPB 16AT	FEPB 16BT	FEPB 16CT	FEPB 16DT	FEPB 16FT	FEPB 16GT	FEPB 16HT	FEPB 16JT	UNITS	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	150	200	300	400	500	600	Volts	
Maximum RMS voltage	V <sub>RMS</sub>	35	70	105	140	210	280	350	420	Volts	
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	150	200	300	400	500	600	Volts	
Maximum average forward rectified current at T <sub>C</sub> =100°C	I <sub>(AV)</sub>	16.0								Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at T <sub>C</sub> =100°C per leg	I <sub>FSM</sub>	200.0								Amps	
Maximum instantaneous forward voltage per leg at 8.0A	V <sub>F</sub>	0.95			1.3		1.5			Volts	
Maximum DC reverse current at rated DC blocking voltage per leg	I <sub>R</sub>	10.0			500.0					µA	
Maximum reverse recovery time (NOTE 1) per leg	t <sub>rr</sub>	35.0			50.0					ns	
Typical junction capacitance per leg (NOTE 2)	C <sub>J</sub>	85.0						60.0		pF	
Typical thermal resistance (NOTE 3)	R <sub>θJC</sub>	2.2								°C/W	
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150									°C

**NOTES:**  
 (1) Reverse recovery test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A  
 (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts  
 (3) Thermal resistance from junction to case per leg mounted on heatsink

**RATINGS AND CHARACTERISTICS CURVES FEPB16AT THRU FEPB16JT**

