

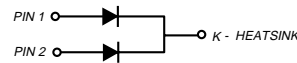
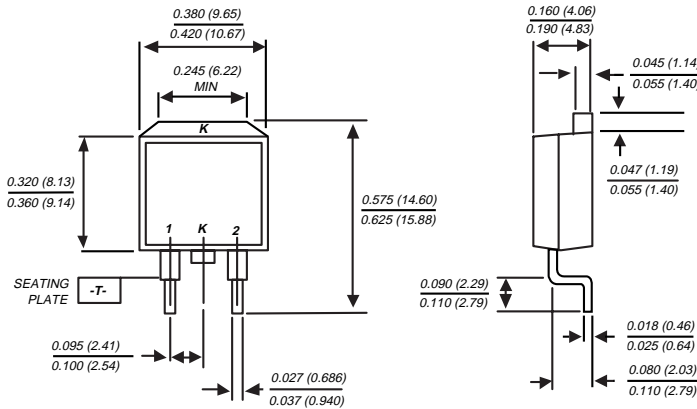
# FEPB16AT THRU FEPB16JT

## FAST EFFICIENT PLASTIC RECTIFIER

Reverse Voltage - 50 to 600 Volts

Forward Current - 16.0 Amperes

### TO-263AB



Dimensions are in inches and (millimeters)

### 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	VRRM	50	100	150	200	300	400	500	600	Volts	
Maximum RMS voltage	VRMS	35	70	105	140	210	280	350	420	Volts	
Maximum DC blocking voltage	VDC	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

FIG. 1 - FORWARD CURRENT DERATING CURVE

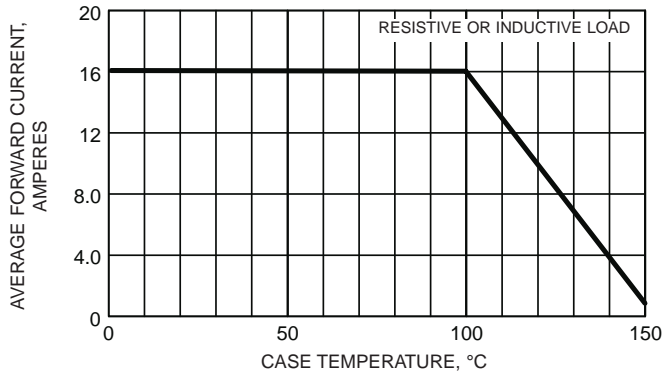


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

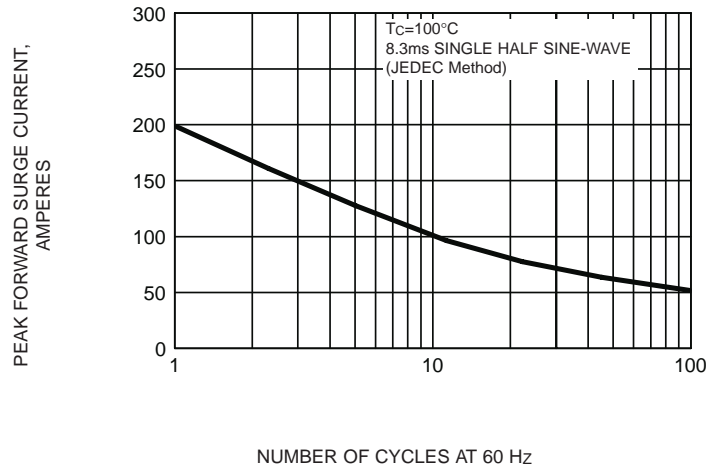


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

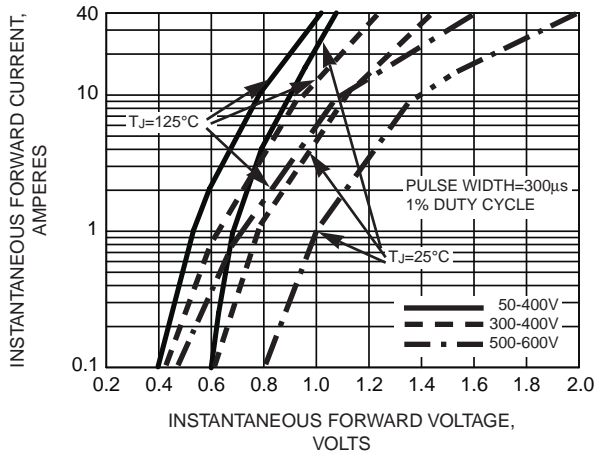


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

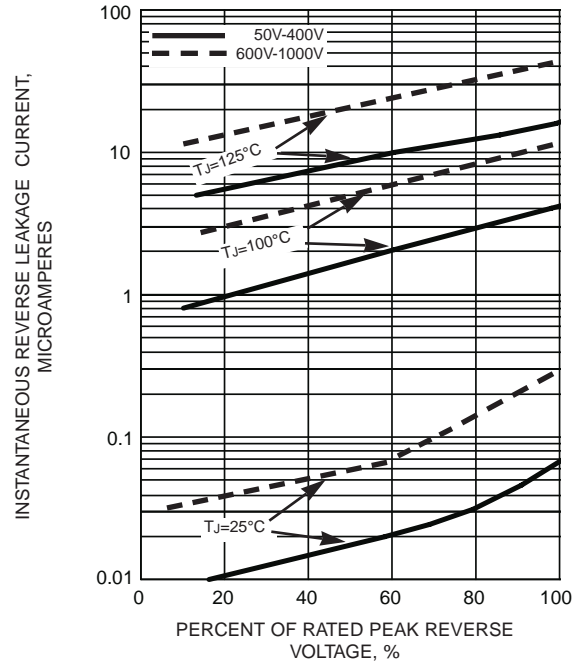


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

