

# Silicon Diode

## **FEPF6AT**

Fast Efficient Rectifier

50V / 6A

# DATASHEET

from

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

OEM – General Semiconductor

Source: General Semiconductor Databook 1998

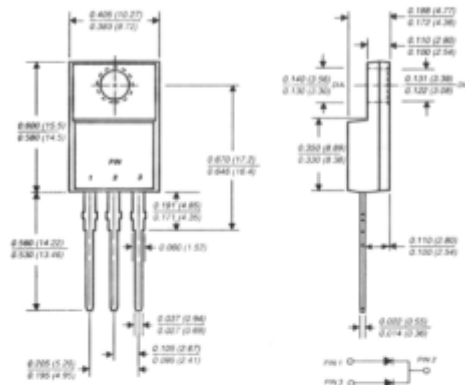
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# FEPF6AT THRU FEPF6DT

## FAST EFFICIENT PLASTIC RECTIFIER

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

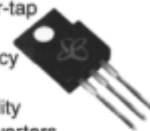
### ITO-220AB



Dimensions in inches and (millimeters)

### FEATURES

- ◆ Plastic package has carries 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 guaranteed: 250°C, 0.25" (6.35mm) from case for 10 seconds



### MECHANICAL DATA

**Case:** JEDEC ITO-220AB molded plastic body over passivated chips  
**Terminals:** Plated lead solderable per MIL-STD-750, Method 2026  
**Polarity:** As marked  
**Mounting Position:** Any  
**Weight:** 0.08 ounce, 2.24 grams  
**Mounting Torque:** 5 in. - lb. max.

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

	SYMBOLS	FEPF6AT	FEPF6BT	FEPF6CT	FEPF6DT	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	150	200	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	105	140	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	150	200	Volts
Maximum average forward rectified current T <sub>C</sub> =100°C	I <sub>(AV)</sub>	6.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	100.0				Amps
Maximum instantaneous forward voltage per leg at 3.0A	V <sub>F</sub>	0.975				Volts
Maximum DC reverse current at rated DC blocking voltage T <sub>A</sub> =25°C T <sub>A</sub> =100°C	I <sub>R</sub>	5.0 50.0				µA
Maximum reverse recovery time per leg (NOTE 1)	t <sub>rr</sub>	35.0				ns
Typical thermal resistance (NOTE 2)	R <sub>θJC</sub>	5.4				°C/W
Typical junction capacitance per leg (NOTE 3)	C <sub>J</sub>	28.0				pF
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) 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 FEPF6AT THRU FEPF6DT**

