

# Silicon Diode

## **FEPF16CT**

Fast Efficient Rectifier

150V / 16A

# DATASHEET

from

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

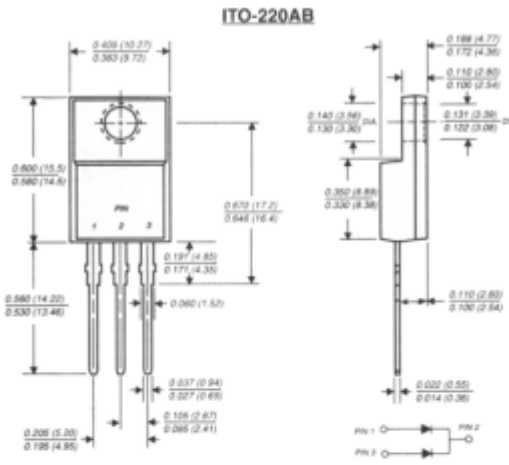
OEM – General Semiconductor

Source: General Semiconductor Databook 1998

**NEW PRODUCT** **NEW PRODUCT** **NEW PRODUCT**

# FEPF16AT THRU FEPF16JT

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



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 guaranteed: 250°C, 0.25" (6.35mm) from case for 10 seconds

## MECHANICAL DATA

**Case:** JEDEC TO-220AB 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  
**Mounting Torque:** 5 in. - lbs. max.

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	FEPF 16AT	FEPF 16BT	FEPF 16CT	FEPF 16DT	FEPF 16FT	FEPF 16GT	FEPF 16HT	FEPF 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(AV)	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	IFSM	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>	5.0								°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>R</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>F</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 FEFP16AT THRU FEFP16JT**

