

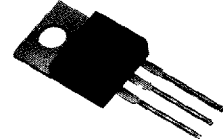
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FEP16AT THRU FEP16JT

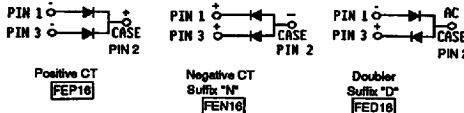
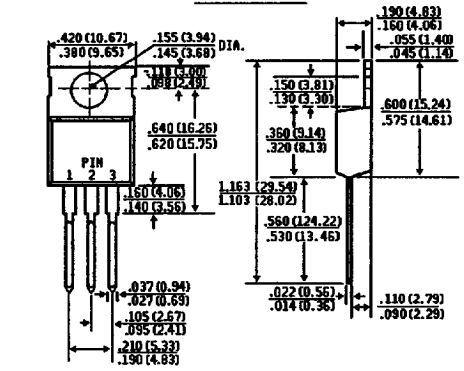
FAST EFFICIENT GLASS PASSIVATED RECTIFIER
Voltage - 50 to 600 Volts Current - 16.0 Amperes

FEATURES

- ◆ Dual rectifier construction, positive centertap
- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Glass passivated chip junctions
- ◆ Low power loss
- ◆ Low forward voltage, high current capability
- ◆ High surge capability
- ◆ Superfast recovery times for high efficiency
- ◆ High temperature soldering guaranteed: 250°C., .25", (6.35mm) from case for 10 seconds



TO-220 CT



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: JEDEC TO-220 molded plastic

Terminals: Plated Leads solderable per MIL-STD-202, Method 208

Polarity: As marked

Mounting Position: Any

Weight: 0.08 ounce, 2.24 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Resistive or inductive load.
 For capacitive load, derate current by 20%.

		FEP 16AT	FEP 16BT	FEP 16CT	FEP 16DT	FEP 16FT	FEP 16GT	FEP 16HT	FEP 16JT	UNITS	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	500	600	Volts	
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	350	420	Volts	
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	500	600	Volts	
Maximum Average Forward Rectified Current at T _C =100°C	I <sub(av)< sub=""></sub(av)<>	16.0								Amps	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	200.0								Amps	
Maximum Instantaneous Forward Voltage per leg at 8.0A	V _F	0.95			1.3			1.5		Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage T _C =25°C	I _R	10.0								μA	
Maximum DC Reverse Current at Rated DC Blocking Voltage T _C =100°C	I _R	500.0								μA	
Maximum Reverse Recovery Time (NOTE 2) per leg T _J = 25°C	T _{RR}	35.0				50.0				nS	
Typical Junction Capacitance per leg (NOTE 1)	C _J	85.0						60.0			pf
Maximum Thermal Resistance (NOTE 3)	R _{θJC}	3.0								°C/W	
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150								°C	

- NOTES:**
1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
 2. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, recover to 0.25A.
 3. Thermal Resistance from Junction to Case per leg.

RATINGS AND CHARACTERISTIC CURVES FEP16AT THRU FEP16JT

FIG. 1 — FORWARD CURRENT DERATING CURVE

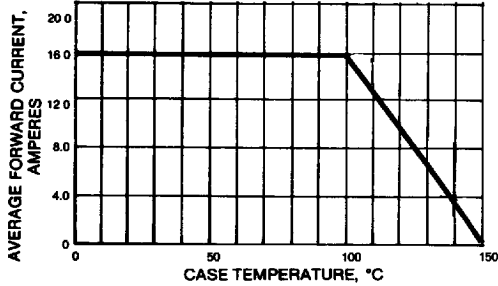


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

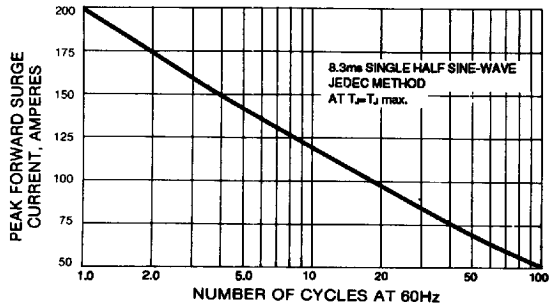


FIG. 3 — TYPICAL REVERSE CHARACTERISTICS PER LEG

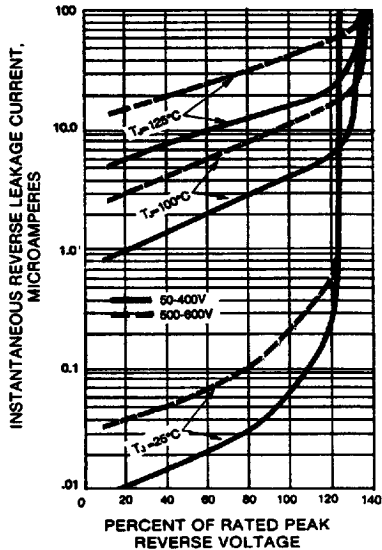


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

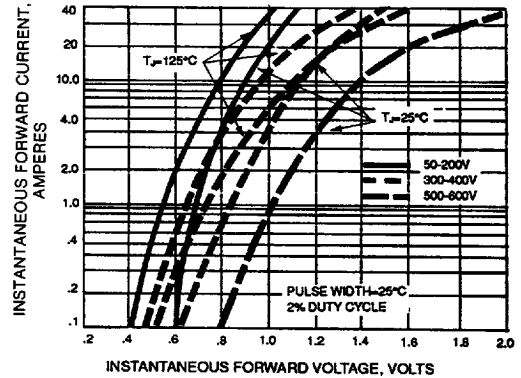
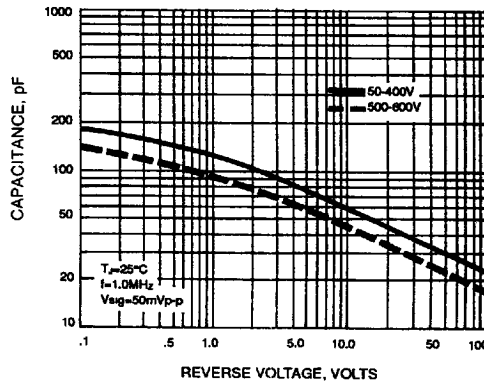


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG



GENERAL INSTRUMENT