

T-03-17

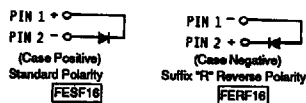
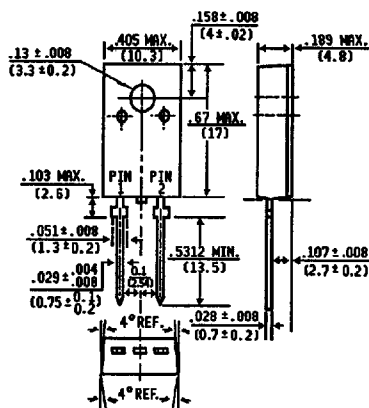
FESF16AT THRU FESF16JT

FAST EFFICIENT GLASS PASSIVATED RECTIFIER

Voltage - 50 to 600 Volts Current - 16.0 Amperes

FEATURES

- ◆ Isolated plastic package has Underwriters Laboratory Flammability Classification 94V-O
- ◆ 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
- ◆ Internal Insulation: 1.5k VRMS



Dimensions in inches and millimeters

MECHANICAL DATA

Case: JEDEC ITO-220 Fully overmolded plastic

Terminals: Plated Lead solderable per MIL-STD-202 Method 208

Polarity: As marked

Mounting Position: Any

Mounting Torque: 5 in. - lb. max.

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%.

		FESF SYMBOLS	FESF 16AT	FESF 16BT	FESF 16CT	FESF 16DT	FESF 16FT	FESF 16GT	FESF 16HT	FESF 16JT	UNITS	
Maximum Recurrent 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 TC=100°C	IAV	16.0									Amps	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	250.0									Amps	
Maximum Instantaneous Forward Voltage at 16A	VF	0.95			1.3			1.5			Volts	
Maximum DC Reverse Current TC=25°C at Rated DC Blocking Voltage TC=100°C	IR	10.0			500.0							µA
Maximum Reverse Recovery Time (NOTE 2) TJ=25°C	TRR	35.0			50.0							nS
Typical Junction Capacitance (NOTE 1)	CJ	175.0						145.0			pf	
Typical Thermal Resistance (NOTE 3)	RθJC	1.7										°C/W
Operating and Storage Temperature Range	TJ,TSTG	-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.

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RATINGS AND CHARACTERISTIC CURVES FESF16AT THRU FESF16JT

Fig. 1— FORWARD CURRENT DERATING CURVE

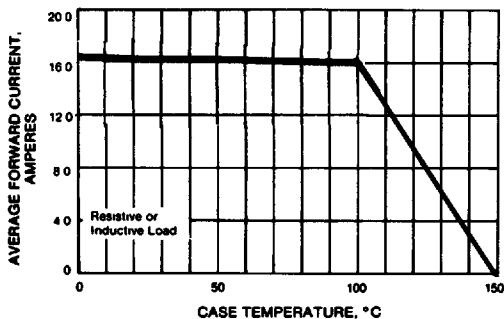


FIG. 2 — MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT

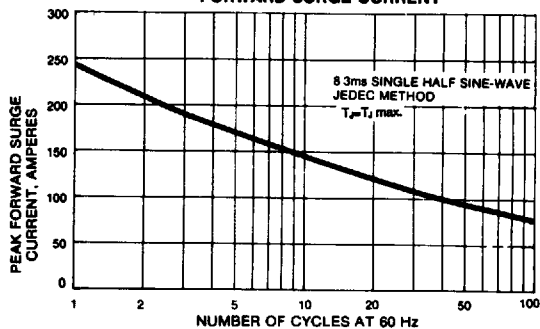


FIG. 3 —TYPICAL REVERSE CHARACTERISTICS

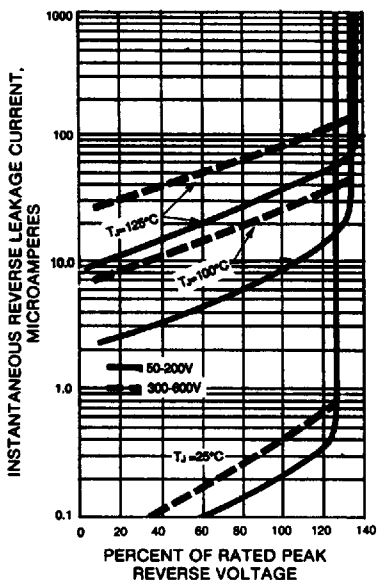


Fig. 4—TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

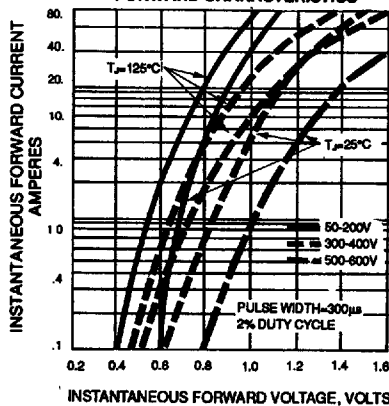


FIG. 5 — TYPICAL JUNCTION CAPACITANCE

