

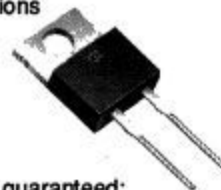
FES8AT THRU FES8JT

FAST EFFICIENT GLASS PASSIVATED RECTIFIER

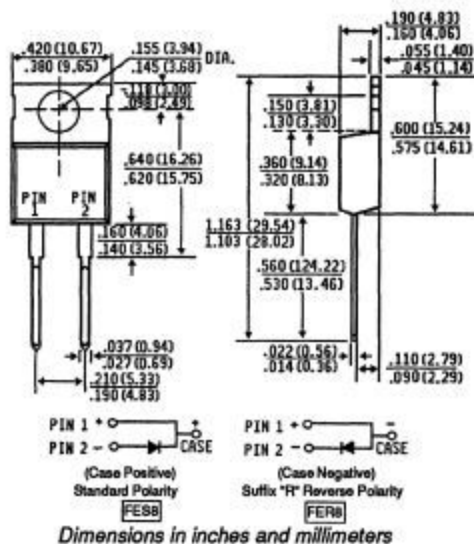
Voltage - 50 to 600 Volts Current - 8.0 Amperes

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Glass passivated chip junctions
- ◆ Low leakage, high voltage
- ◆ Low leakage
- ◆ 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



MECHANICAL DATA

Case: JEDEC TO-220 molded plastic

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

Polarity: As marked

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%.

		FES 8AT	FES 8BT	FES 8CT	FES 8DT	FES 8FT	FES 8GT	FES 8HT	FES 8JT	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 $T_C=100^\circ\text{C}$	$I_{(AV)}$	8.0								Amps	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125.0								Amps	
Maximum Instantaneous Forward Voltage at 8.0A	V_F	0.95			1.3		1.5			Volts	
Maximum DC Reverse Current $T_C=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_C=100^\circ\text{C}$	I_R	10.0 500.0								μA	
Maximum Reverse Recovery Time (NOTE 2) $T_J=25^\circ\text{C}$	T_{RR}	35.0				50.0				nS	
Typical Junction Capacitance (NOTE 1)	C_J	85.0						60.0		pf	
Typical Thermal Resistance (NOTE 3)	$R_{\theta JC}$	2.5									$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150									$^\circ\text{C}$

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
2. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, recover to 0.25A.
3. Thermal Resistance from Junction to Case.