

FES16AT - FES16JT

PRV : 50 - 600 Volts

Io : 16 Ampere

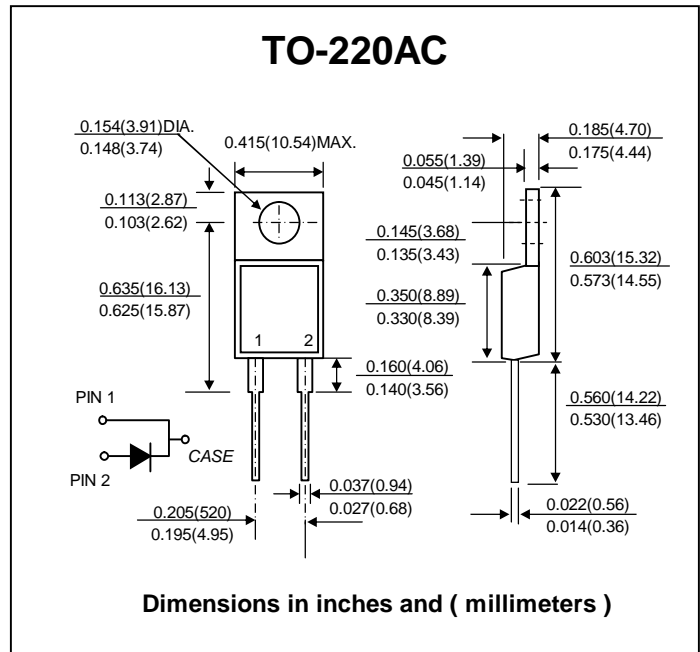
FEATURES :

- * High current capability
- * High surge current capability
- * Low leakage, high voltage
- * Glass passivated chip junction
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : Epoxy, Molded
- * Lead Temperature for Soldering Purposes:
260°C Max. for 10 Seconds
- * Polarity: As marked
- * Mounting Position: Any
- * Weight : 2.24 grams (Approximately)

Ultrafast Plastic Rectifiers



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	FES 16AT	FES 16BT	FES 16CT	FES 16DT	FES 16FT	FES 16GT	FES 16HT	FES 16JT	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	350	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	500	600	V
Maximum Average Forward Current, T _c = 100°C	I _{F(AV)}	16								A
Maximum Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at T _c = 100°C	I _{FSM}	250								A
Maximum Instantaneous Forward Voltage at I _F = 16 A	V _F	0.975			1.3		1.5			V
Maximum Reverse Current at T _c = 25 °C	I _R	10								μA
Rated DC Blocking Voltage T _c = 100 °C	I _{R(H)}	500								μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	35			50					ns
Typical junction capacitance at 4V, 1MHz	C _j	175						145		pF
Maximum Thermal Resistance, Junction to Case	R _{θJC}	1.2								°C/W
Operating storage and temperature range	T _J , T _{STG}	- 65 to + 150								°C

Note :

(1) Reverse Recovery Test Conditions : I_F = 0.5A, I_R = 1A ; I_{rr} = 0.25 A

RATING AND CHARACTERISTIC CURVES (FES16AT ~ FES16JT)

FIG.1 - FORWARD CURRENT DERATING CURRENT

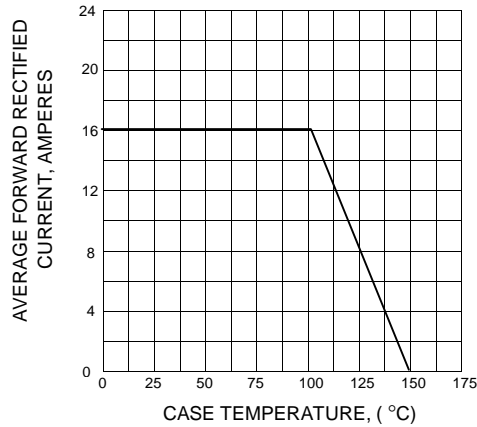


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

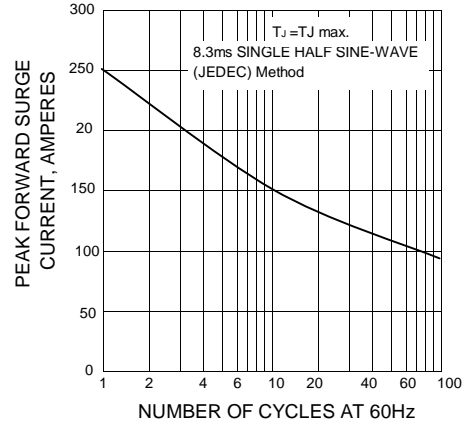


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

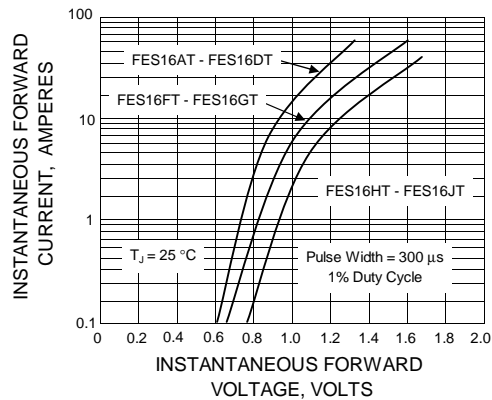


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

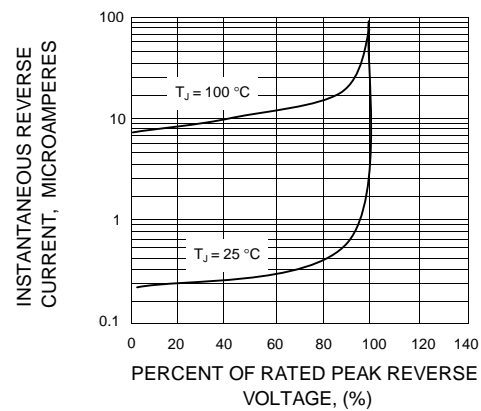


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

