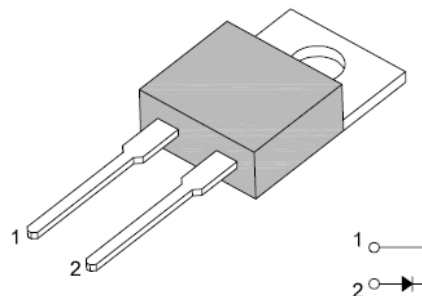


8A Fast Efficient Rectifiers

Features

- Glass passivated chip junction
- Super fast recovery times, high voltage
- Low switching losses, high efficiency
- Low leakage current
- Low forward voltage, high current capability
- High surge current capability
- RoHS Compliance



TO-220AC



Mechanical Data

Case:	TO-220AC, molded plastic
Epoxy:	Plastic package has UL flammability classification 94V-0
Terminals:	Lead, solderable per MIL-STD-202, Method 208
Polarity:	As marked
Mounting Torque:	10 in-lbs maximum
Weight:	0.08 ounces, 2.24 grams

Maximum Ratings and Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	FES 8AT	FES 8BT	FES 8CT	FES 8DT	FES 8FT	FES 8GT	FES 8HT	FES 8JT	Unit	Conditions
	Marking Code	FES 8AT	FES 8BT	FES 8CT	FES 8DT	FES 8FT	FES 8GT	FES 8HT	FES 8JT		
V_{RRM}	Maximum Repetitive Peak Reverse Voltage	50	100	150	200	300	400	500	600	V	
V_{RMS}	Maximum RMS Voltage	35	70	105	140	210	280	350	420	V	
V_{DC}	Maximum DC Blocking Voltage	50	100	150	200	300	400	500	600	V	
I_{F(AV)}	Maximum Average Forward Rectified Current	8								A	T _c =100°C
I_{FSM}	Peak Forward Surge Current per leg	125								A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)

8A Fast Efficient Rectifiers

FES8AT - FES8JT

Symbol	Description	FES 8AT	FES 8BT	FES 8CT	FES 8DT	FES 8FT	FES 8GT	FES 8HT	FES 8JT	Unit	Conditions	
V_F	Maximum Instantaneous Forward Voltage per leg	0.95				1.30		1.50		V	$I_F=8.0A$ Note 1	
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage	10									μA	$T_C=25^\circ C$
		500										$T_C=100^\circ C$
T_{rr}	Typical Reverse Recovery Time per leg	35				50				nS	$I_F=0.5A, I_R=1A, I_{rr}=0.25A$	
C_J	Typical Junction Capacitance per leg	85						50		pF	$V_R=4V, f=1MHz$	
R_{thJC}	Typical Thermal Resistance from Junction to Case per leg	2.2									$^\circ C/W$	
T_J, T_{STG}	Operating Junction and Storage Temperature Range	-55 to +150									$^\circ C$	

Note: Pulse test: 300 μ S pulse width, 1% duty cycle.

Typical Characteristics Curves

Fig.1-Forward Current Derating Curve

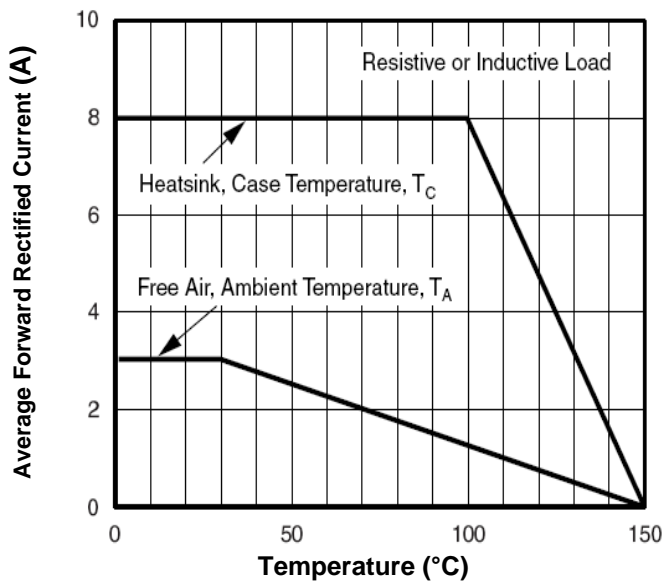
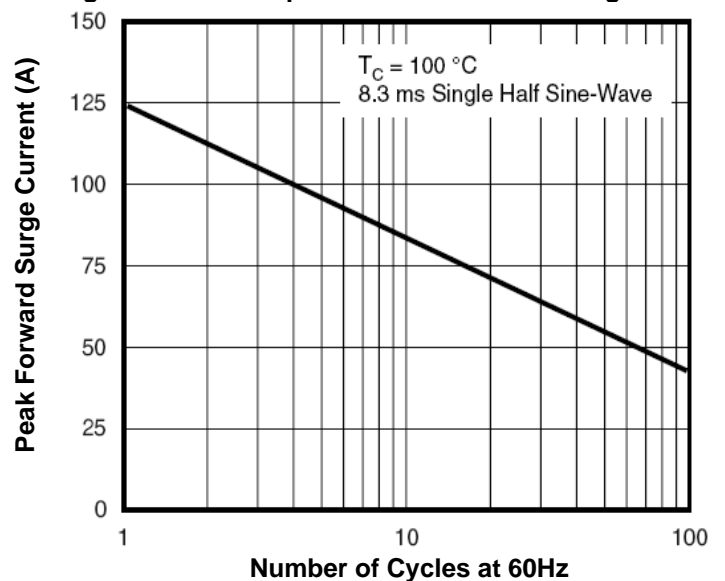


Fig.2-Max. Non-Repetitive Peak Forward Surge Current



8A Fast Efficient Rectifiers

FES8AT - FES8JT

Fig.3- Typical Instantaneous Forward Characteristics

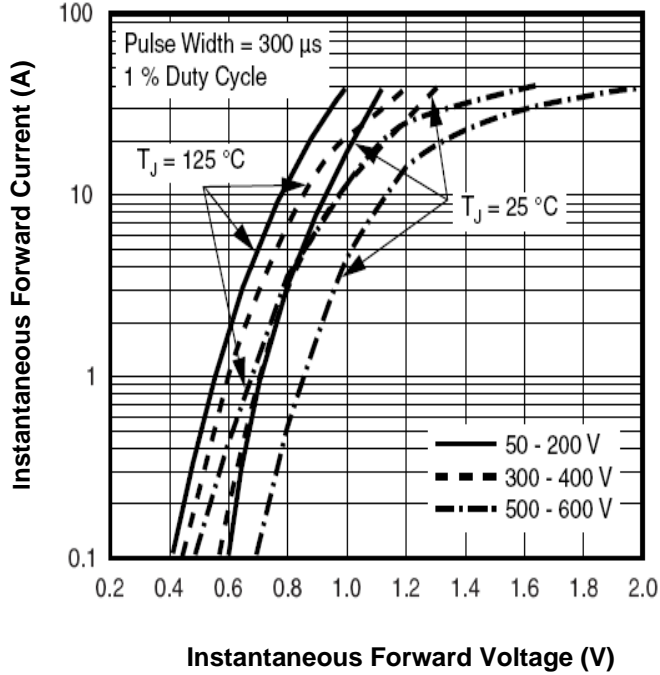


Fig.4-Typical Reverse Leakage Characteristics

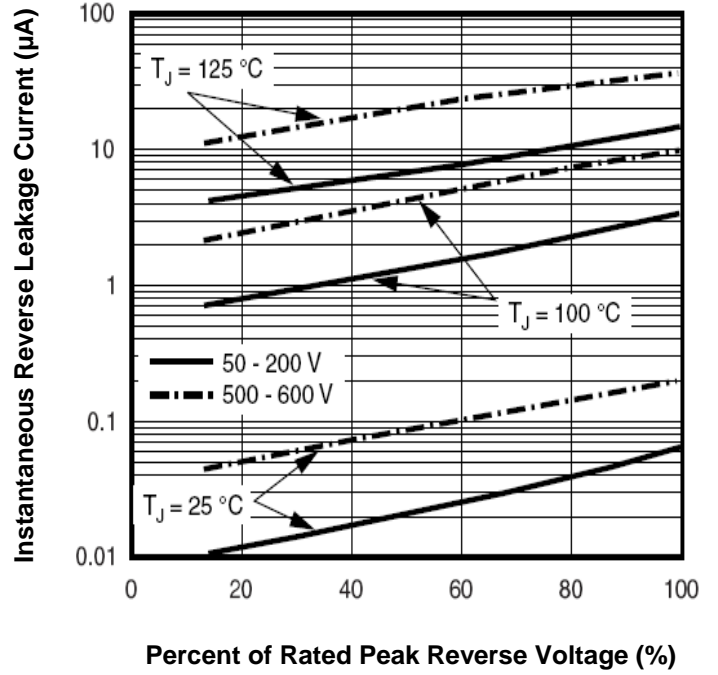
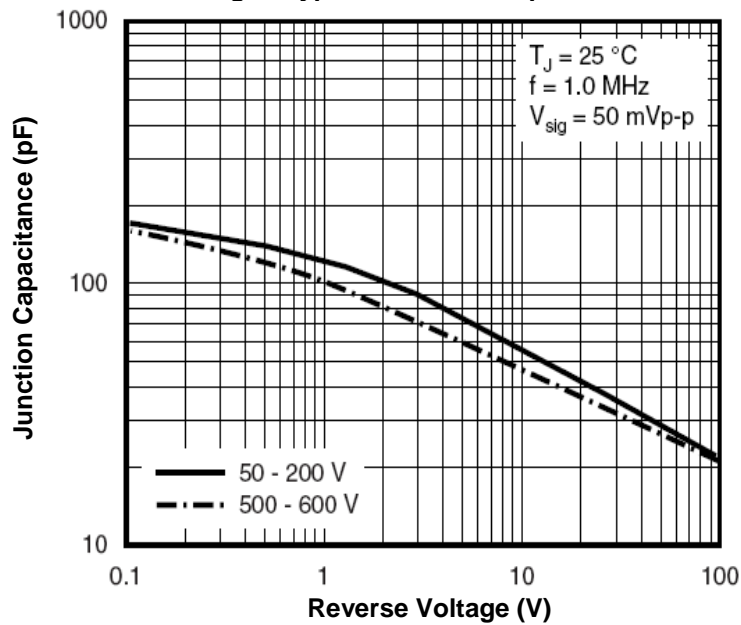
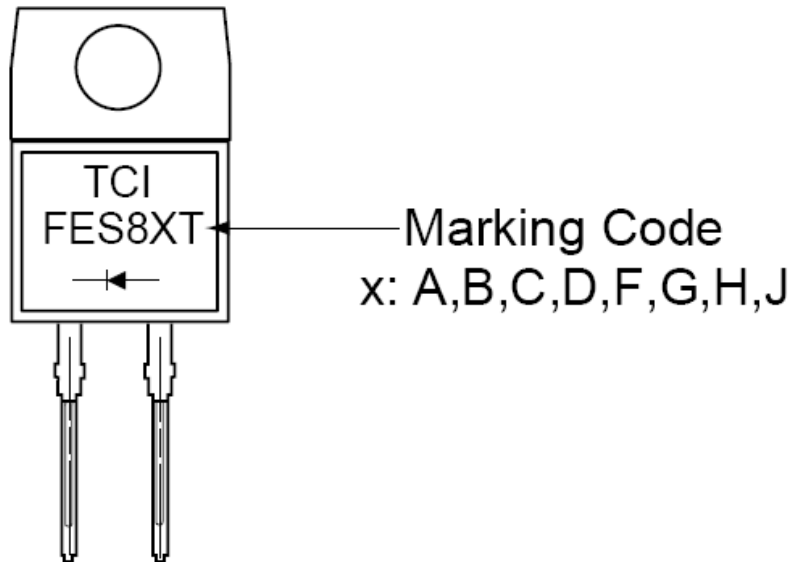


Fig.5- Typical Junction Capacitance

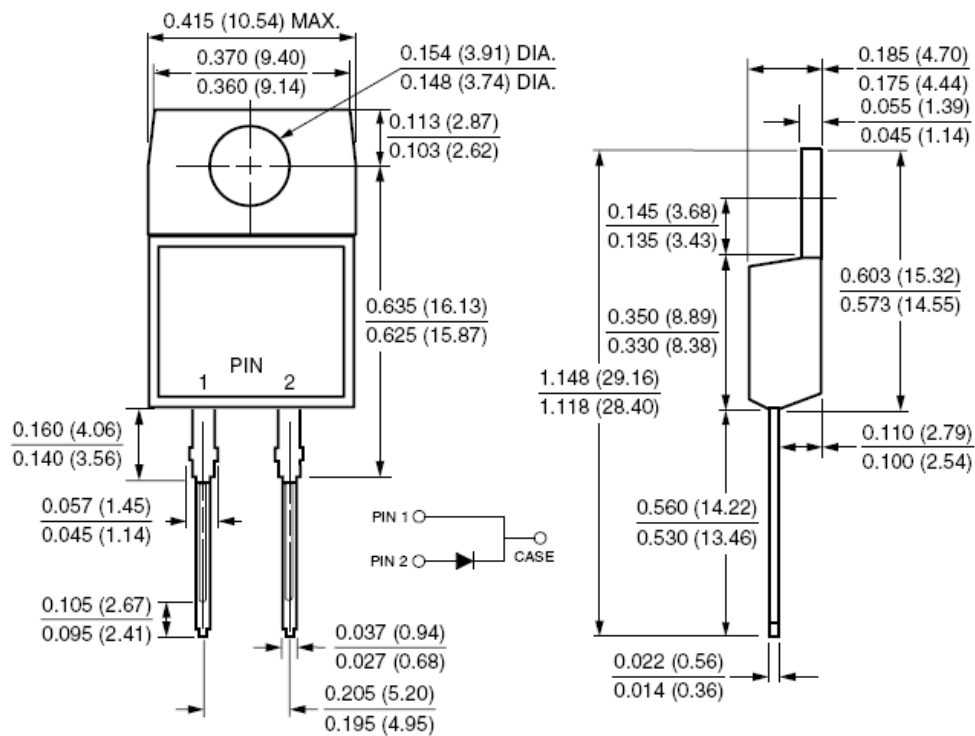


FES8AT - FES8JT

Marking Information:



Dimensions in inches (mm)



TO-220AC

TAITRON
components incorporated

8A Fast Efficient Rectifiers

FES8AT - FES8JT

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