

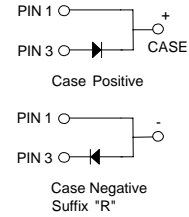
FES16AT - FES16JT



TO-220AC

Features

- Low forward voltage drop.
- High surge current capacity.
- High current capability.
- High reliability.



Fast Rectifiers (Glass Passivated)

Absolute Maximum Ratings*

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value								Units
		16AT	16BT	16CT	16DT	16FT	16GT	16HT	16JT	
V _{RRM}	Maximum Repetitive Reverse Voltage	50	100	150	200	300	400	500	600	V
I _{F(AV)}	Average Rectified Forward Current, .375" lead length @ T _A = 100°C	16								A
I _{FSM}	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	250								A
T _{stg}	Storage Temperature Range	-65 to +150								V
T _J	Operating Junction Temperature	-65 to +150								pF

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics

Symbol	Parameter	Value	Units
P _D	Power Dissipation	7.81	W
R _{θJA}	Thermal Resistance, Junction to Ambient	16	°C/W
R _{θJL}	Thermal Resistance, Junction to Lead	1.2	°C/W

Electrical Characteristics

T_A = 25°C unless otherwise noted

Symbol	Parameter	Device								Units
		16AT	16BT	16CT	16DT	16FT	16GT	16HT	16JT	
V _F	Forward Voltage @ 8.0A	0.95				1.3	1.5			V
t _{rr}	Reverse Recovery Time I _F = 0.5 A, I _R = 1.0 A, I _{RR} = 0.25 A	35				50				ns
I _R	Reverse Current @ rated V _R T _A = 25°C T _A = 100°C	10				500				μA μA
C _T	Total Capacitance V _R = 4.0, f = 1.0 MHz	170						145		pF

Typical Characteristics

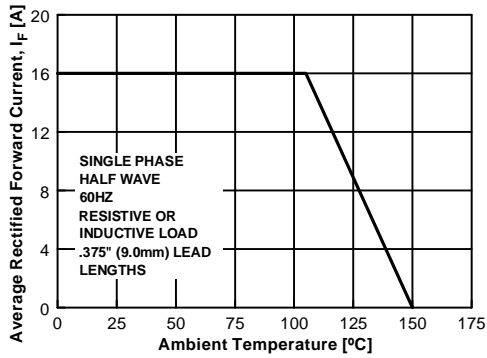


Figure 1. Forward Current Derating Curve

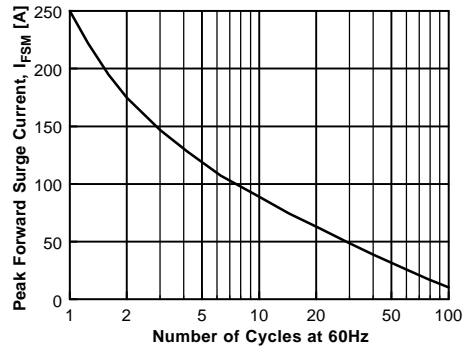


Figure 2. Non-Repetitive Surge Current

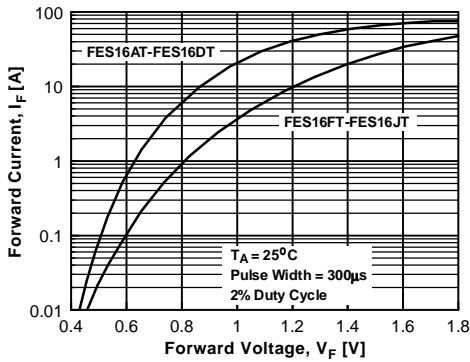


Figure 3. Forward Voltage Characteristics

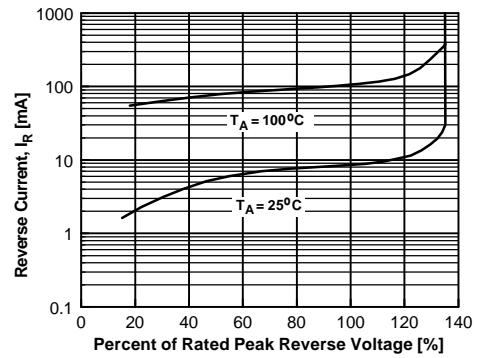


Figure 4. Reverse Current vs Reverse Voltage

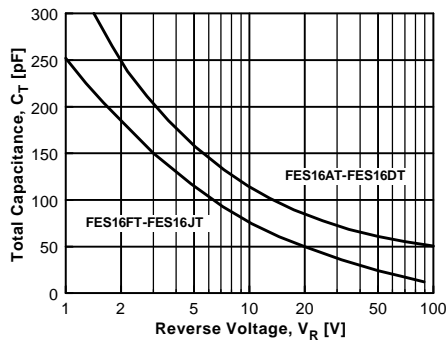
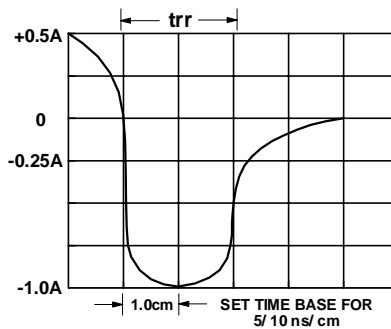
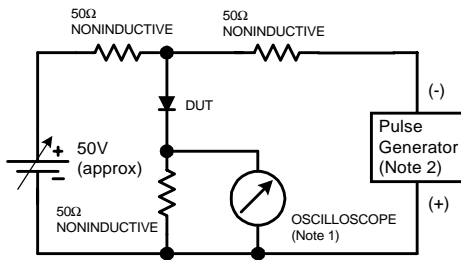


Figure 5. Total Capacitance



Reverse Recovery Time Characteristic and Test Circuit Diagram

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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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