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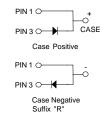


FES16AT - FES16JT

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				Α				
I _{FSM}	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	250				Α				
T _{sta}	Storage Temperature Range	-65 to +150			V					
TJ	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 _{eJA}	Thermal Resistance, Junction to Ambient	16	°C/W
$R_{\theta JL}$	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 $I_F = 0.5 \text{ A}, I_R = 1.0 \text{ A}, I_{RR} = 0.25 \text{ A}$	35 50					ns			
I _R	Reverse Current @ rated V_R $T_A = 25^{\circ}C$ $T_A = 100^{\circ}C$	10 500						μA μA		
C _T	Total Capacitance $V_R = 4.0$. $f = 1.0$ MHz	170 145				pF				

Typical Characteristics

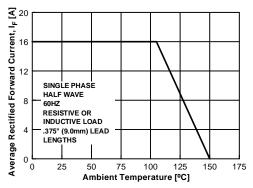


Figure 1. Forward Current Derating Curve

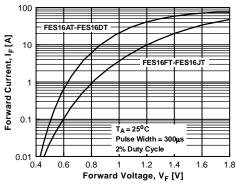


Figure 3. Forward Voltage Characteristics

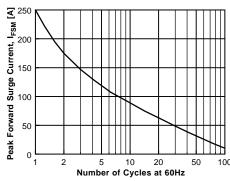


Figure 2. Non-Repetitive Surge Current

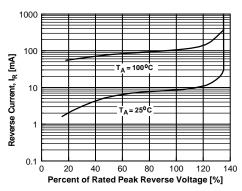


Figure 4. Reverse Current vs Reverse Voltage

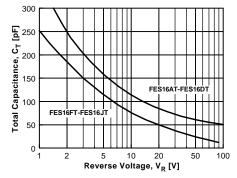
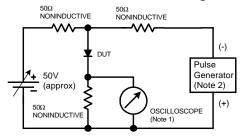
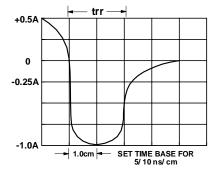


Figure 5. Total Capacitance





Reverse Recovery Time Characterstic and Test Circuit Diagram

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