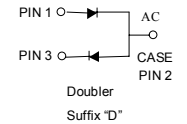
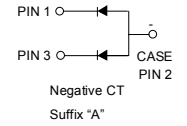
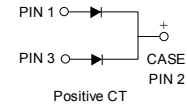
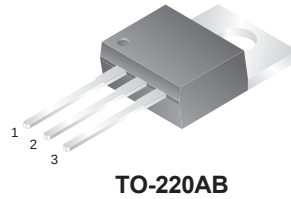


FEP16AT - FEP16JT

Features

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



16 Ampere Glass Passivated Super Fast Rectifiers

Absolute Maximum Ratings*

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
I _{F(AV)}	Average Rectified 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 Superimposed on rated load (JEDEC method)	200	A
P _D	Total Device Dissipation Derate above 25°C	8.33 66	W mW/°C
R _{θJA}	Thermal Resistance, Junction to Ambient	15	°C/W
R _{θJL}	Thermal Resistance, Junction to Lead	2.2	°C/W
T _{stg}	Storage Temperature Range	-65 to +150	°C
T _J	Operating Junction Temperature	-65 to +150	°C

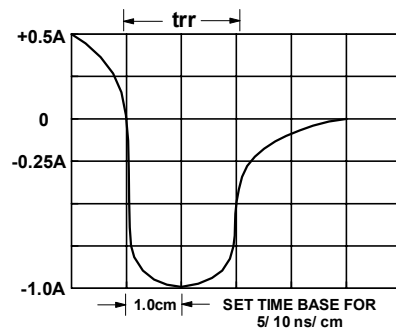
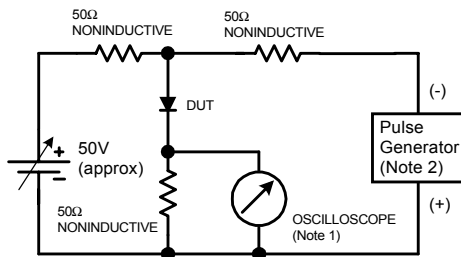
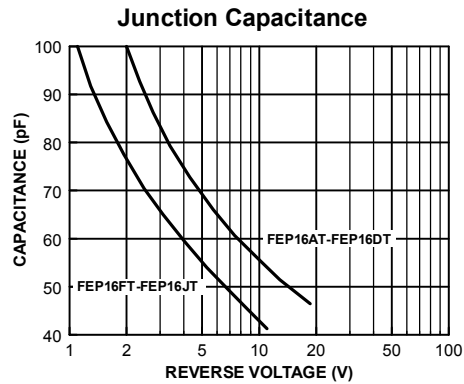
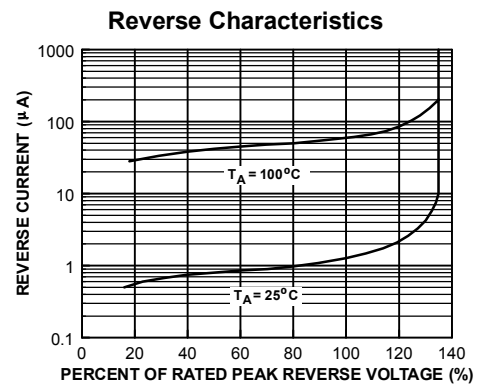
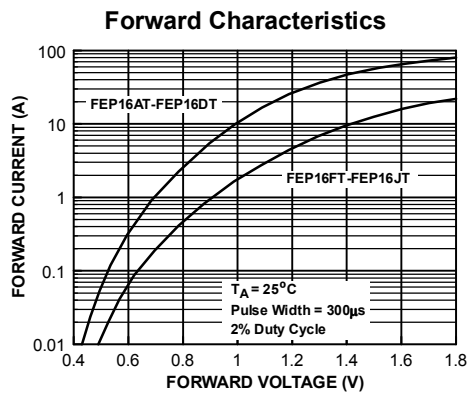
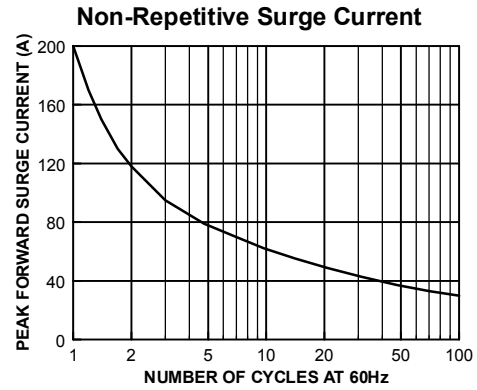
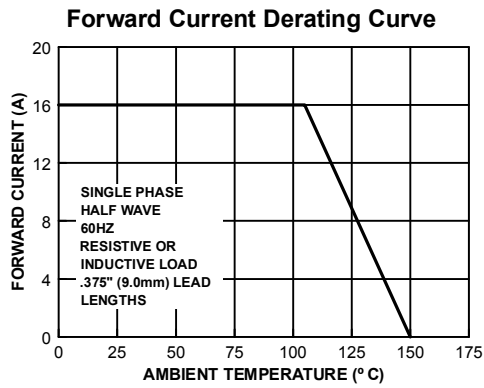
*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Electrical Characteristics

T_A = 25°C unless otherwise noted

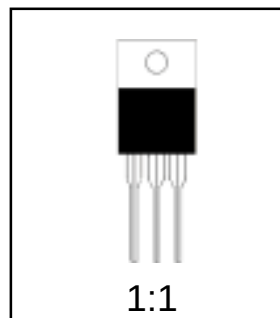
Symbol	Parameter	Device								Units
		16AT	16BT	16CT	16DT	16FT	16GT	16HT	16JT	
V _{RRM}	Maximum Repetitive Reverse Voltage	50	100	150	200	300	400	500	600	V
V _{RMS}	Maximum RMS Voltage	35	70	105	140	210	280	350	420	V
V _R	DC Blocking Voltage (Rated V _R)	50	100	150	200	300	400	500	600	V
I _{RM}	Maximum Instantaneous Reverse Current @ rated V _R T _A = 25°C T _A = 100°C	10 500								μA μA
t _{rr}	Maximum Reverse Recovery Time I _F = 0.5 A, I _R = 1.0 A, I _{RR} = 0.25 A	35				50				ns
V _{FM}	Maximum Instantaneous Forward Voltage @ 8.0A	0.95				1.3		1.5		V
C	Typical Junction Capacitance V _R = 4.0. f = 1.0 MHz	85						60		pF

Typical Characteristics



Reverse Recovery Time Characteristic and Test Circuit Diagram

FAIRCHILD
SEMICONDUCTOR™



Dimensions shown below are in:
inches [millimeters]

[illegible]

TO 220 3 LEAD

1. STANDARD LEAD FINISH :
200 MICROINCHES / 5.08 MICRON MINIMUM
LEAD / TIN 15/85 ON OLIN 194 COPPER OR EQUIVALENT

2. DIMENSION BASED ON JEDEC STANDARD TO-220
VARIATION AB, ISSUE J, DATED 3/24/87

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Datasheet Identification	Product Status	Definition
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