

Pb Free Plating Product

FEP16A thru FEP16J



16.0 Ampere Fast Efficient Plastic Half Bridge Rectifiers

Features

- ★ Glass passivated chip junction
- ★ Fast switching for high efficiency
- ★ Low forward voltage drop and High current capability
- ★ Low reverse leakage current
- ★ High surge current capability

Application

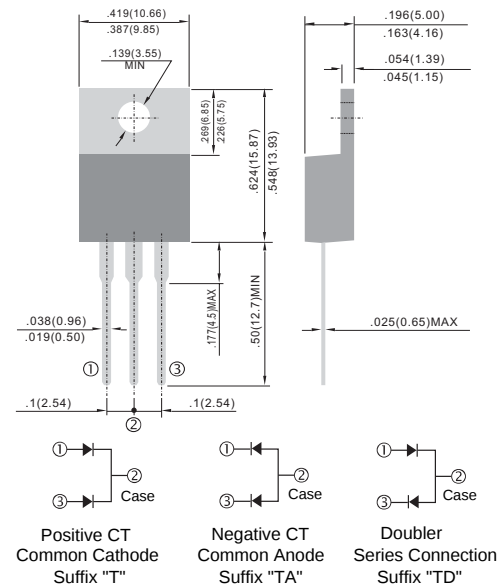
- ★ Automotive Environment|DC Motor Control
- ★ Plating Power Supply|UPS|Inverter
- ★ Car Amplifier and Sound Device System etc..

Mechanical Data

- ★ Case: Molded plastic TO-220AB Heatsink
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-202 method 208
- ★ Polarity: As marked on body
- ★ Mounting position: Any
- ★ Weight: 2.03 grams

TO-220AB

Unit : inch (mm)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Common Cathode Suffix "T" Common Anode Suffix "TA" Anode and Cathode Coexistence Suffix "TD"	SYMBOL	FEP16AT FEP16ATA FEP16ATD	FEP16BT FEP16BTA FEP16BTD	FEP16DT FEP16DTA FEP16DTD	FEP16FT FEP16FTA FEP16FTD	FEP16GT FEP16GTA FEP16GTD	FEP16JT FEP16JTA FEP16JTD	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	600	V
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	V
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	600	V
Maximum Average Forward Rectified Current Tc=100°C	IF(AV)	16.0						A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	175			150			A
Maximum Instantaneous Forward Voltage @ 8.0 A	VF	0.98			1.3		1.7	V
Maximum DC Reverse Current @TJ=25°C At Rated DC Blocking Voltage @TJ=125°C	IR	10.0 250						uA uA
Maximum Reverse Recovery Time (Note 1)	Trr	35						nS
Typical junction Capacitance (Note 2)	CJ	90						pF
Typical Thermal Resistance (Note 3)	RAJC	2.2						°CW
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to + 150						°C

NOTES : (1) Reverse recovery test conditions IF = 0.5A, R = 1.0A, Irr = 0.25A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

(3) Thermal Resistance junction to case.

FIG.1 - FORWARD CURRENT DERATING CURVE

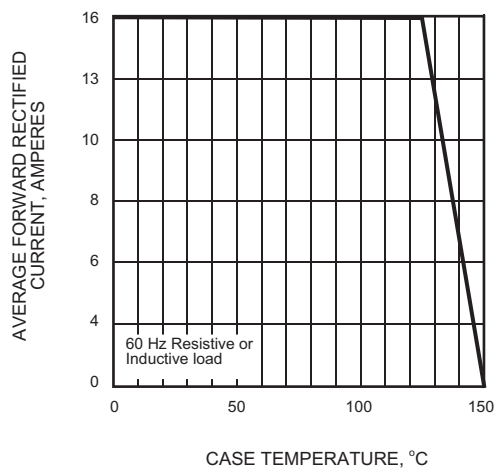


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

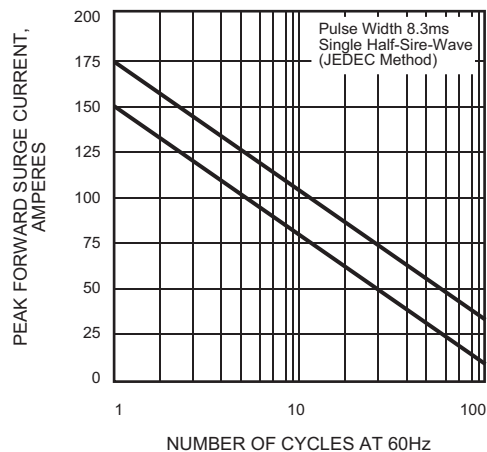


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

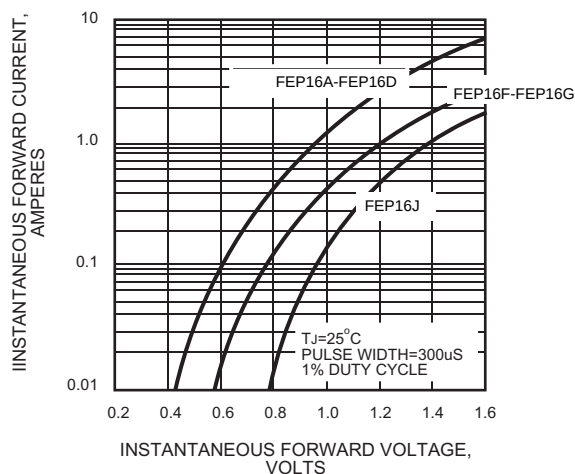


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

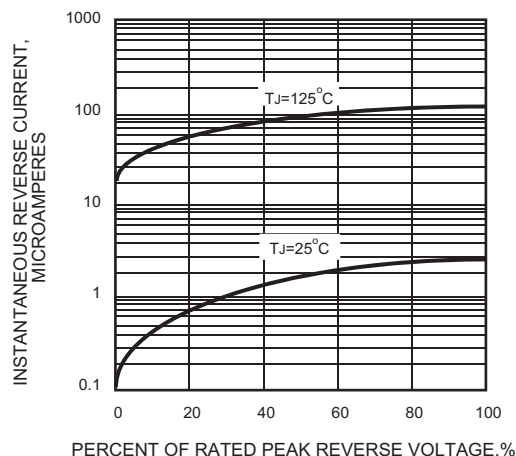


FIG.5 - TYPICAL JUNCTION CAPACITANCE

