FERP16J

Ultra fast Plastic Rectifiers

VOLTAGE: 600V **CURRENT:16.0A**

GULF SEMI

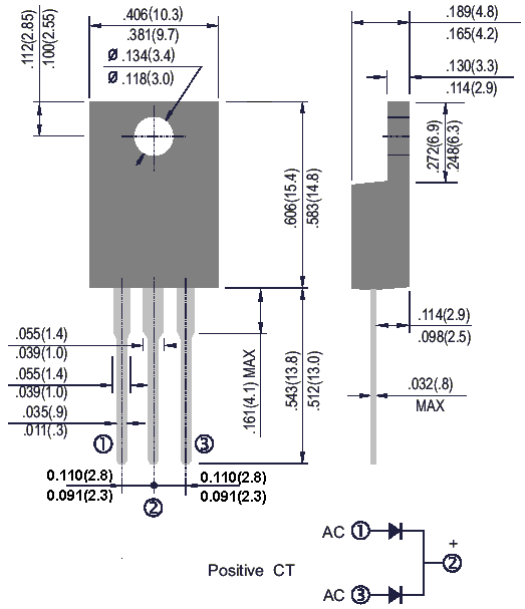
FEATURE

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes
- Ultra fast recovery time for high efficiency
- Excellent high temperature switching
- Glass passivated junction
- High voltage and high reliability
- High speed switching
- Low forward voltage

MECHANICAL DATA

Case: JEDEC ITO-220AB molded plastic body over passivated chip
Terminals: Plated Insert leads, solderable per MIL-STD-750, Method 2026
Mounting Position: Any

ITO-220AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

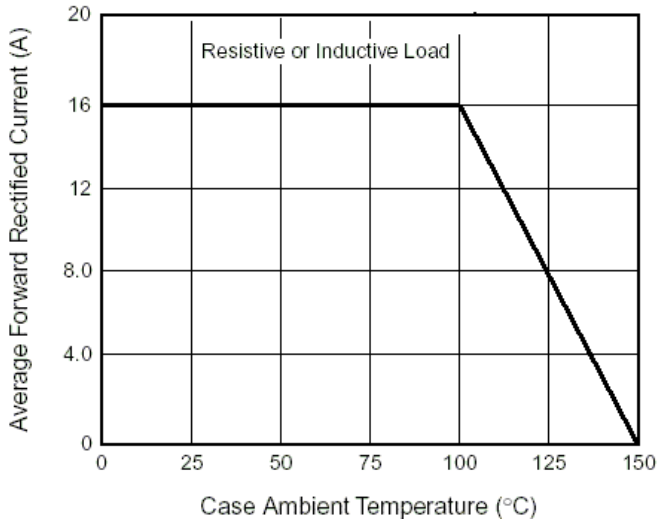
(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	FERP16J	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	600	V
Maximum RMS Voltage	Vrms	420	V
Maximum DC blocking Voltage	Vdc	600	V
Maximum Average Forward Rectified at Tc =100°C	If(av)	16.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	125	A
Maximum Forward Voltage at Forward Current at 8.0A	Vf	1.50	V
Maximum Reverse Recovery Time (Note 1)	Trr	50	nS
Typical thermal resistance junction to case	Rth(jc)	3.1	℃/W
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	Ir	10 500	μA
Typical Junction capacitance per leg at 4V, 1MHz	Cj	60	pF
Storage and Operating Temperature Range	Tstg, Tj	-55 to +150	°C

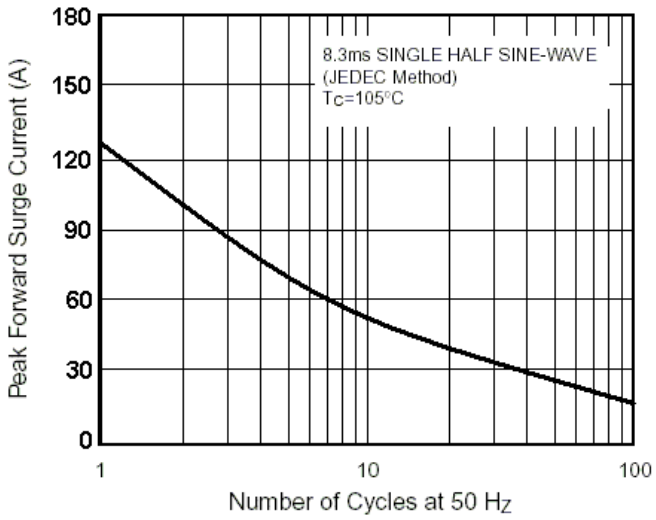
Note:
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A

RATINGS AND CHARACTERISTIC CURVES FERP16J

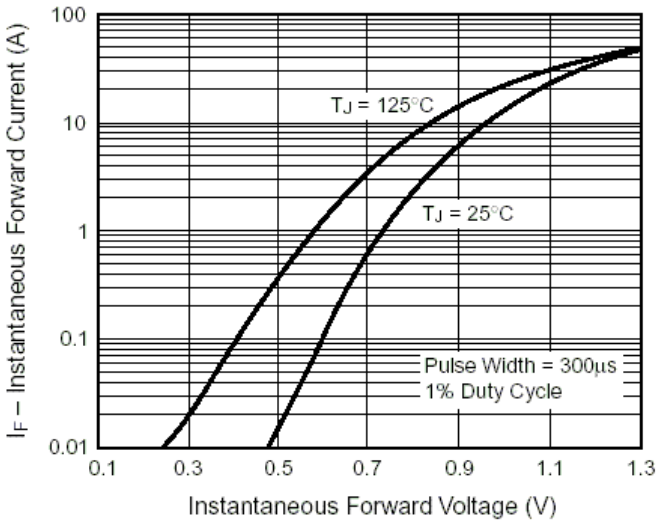
Forward Current Derating Curve



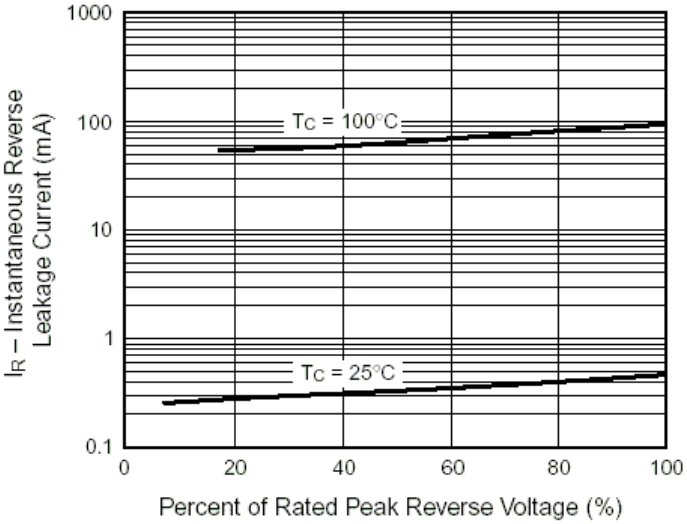
Maximum Non-Repetitive Peak Forward Surge Current Per Leg



Typical Instantaneous Forward Characteristics Per Leg



Typical Reverse Leakage Characteristics Per Leg



Typical Junction Capacitance Per Leg