FERP10F

Ultrafast Plastic Power Rectifiers

VOLTAGE: 300V **CURRENT: 10.0A**

GULF SEMI

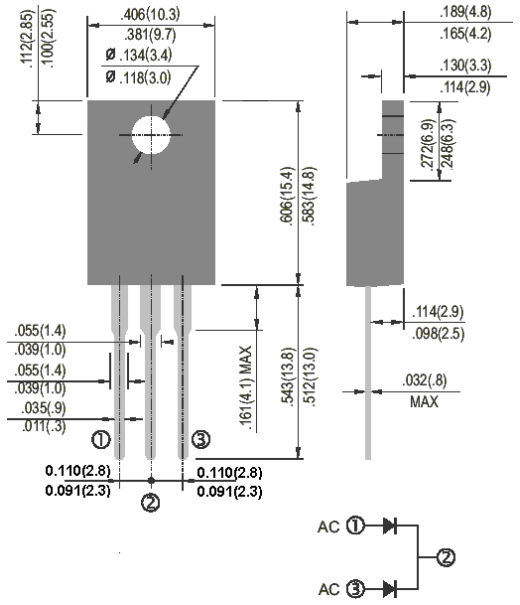
FEATURE

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

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	FERP10F	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	300	V
Maximum RMS Voltage	Vrms	210	V
Maximum DC blocking Voltage	Vdc	300	V
Maximum Average Forward Rectified at Tc =100°C	If(av)	10	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	150	A
Maximum Forward Voltage at Forward Current 5A and 25°C	Vf	1.3	V
Maximum Reverse Recovery Time (Note 1)	Trr	50	nS
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	5.0 500.0	μA
Typical thermal resistance junction to case	Rth(jc)	5.0	℃/W
Storage and Operating Temperature Range	Tstg, Tj	-55 to +150	°C

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

Fig. 1 – Forward Current Derating Curve

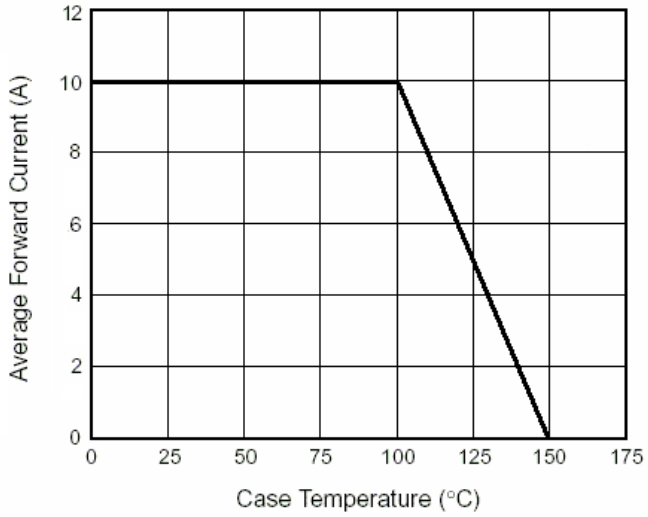


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

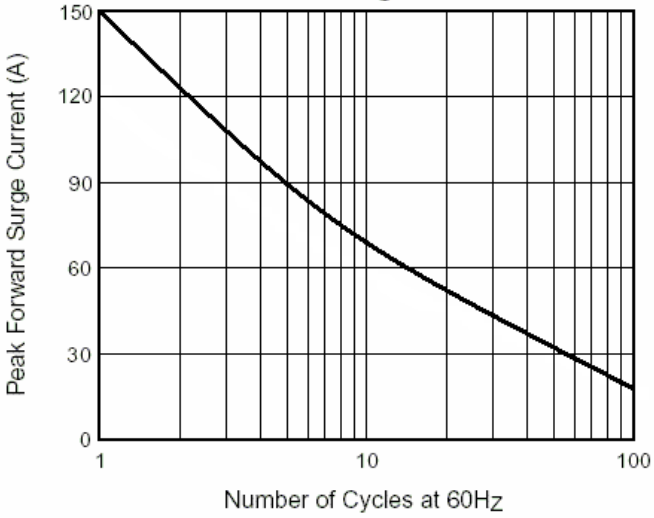


Fig. 3 – Typical Forward Volyage

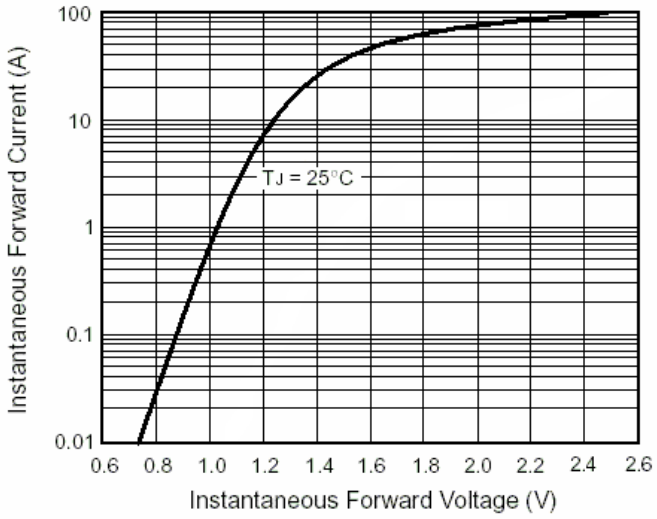


Fig. 4 – Typical Reverse Current

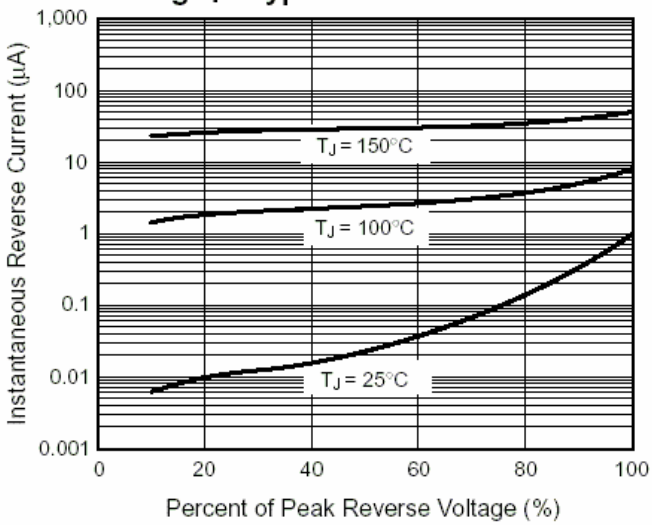


Fig. 5 – Typical Junction Capacitance