## FERP30D

# **Ultra fast Plastic Rectifiers**

VOLTAGE: 200V

CURRENT:30.0A

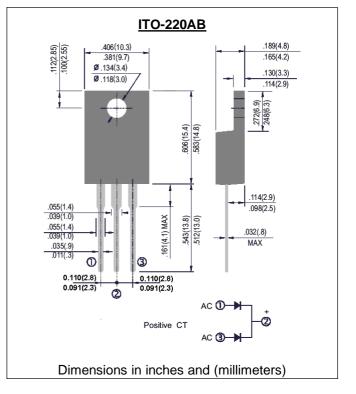


#### FEATURE

- 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



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

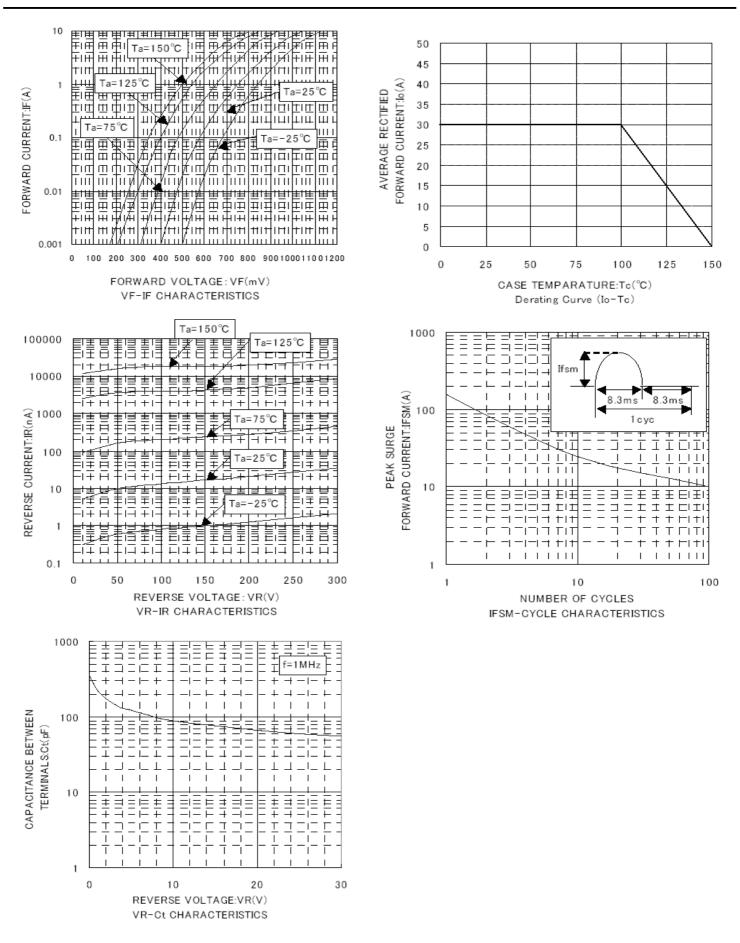
(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	FERP30D	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	200	V
Maximum RMS Voltage	Vrms	140	V
Maximum DC blocking Voltage	Vdc	200	V
Maximum Average Forward Rectified at Tc =100°C	lf(av)	30.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	lfsm	180	A
Maximum Forward Voltage at Forward Current 15A	Vf	1.0	V
Maximum Reverse Recovery Time (Note 1)	Trr	50	nS
Typical thermal resistance junction to case	R θ Jc	5.0	C/W
Maximum DC Reverse CurrentTa = $25^{\circ}C$ at rated DC blocking voltageTa = $100^{\circ}C$	Ir	10 100	μΑ μΑ
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 FERP30D**



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