

# FERP20J

## Ultra fast Plastic Rectifiers

VOLTAGE: 600V

CURRENT:20.0A



### FEATURE

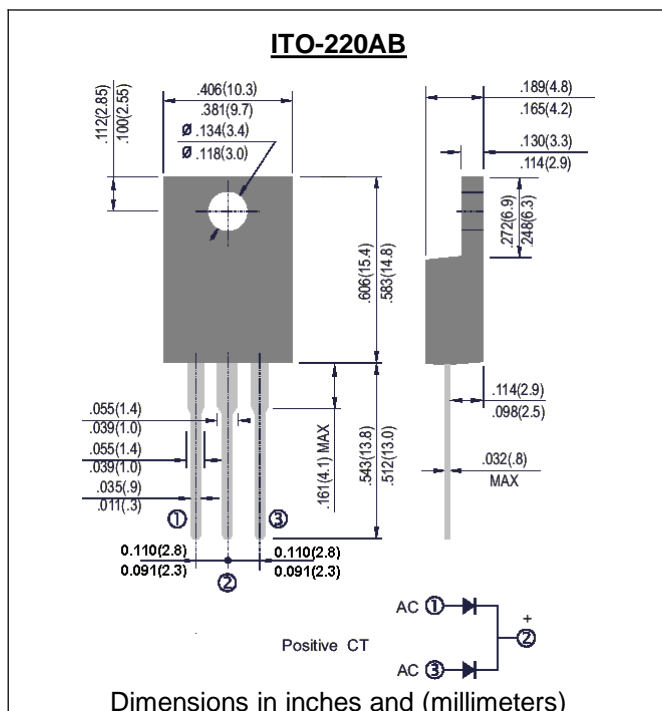
- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes
- Ultra fast recovery time for high efficiency
- Excellent high temperature switching
- Glass passivated junction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

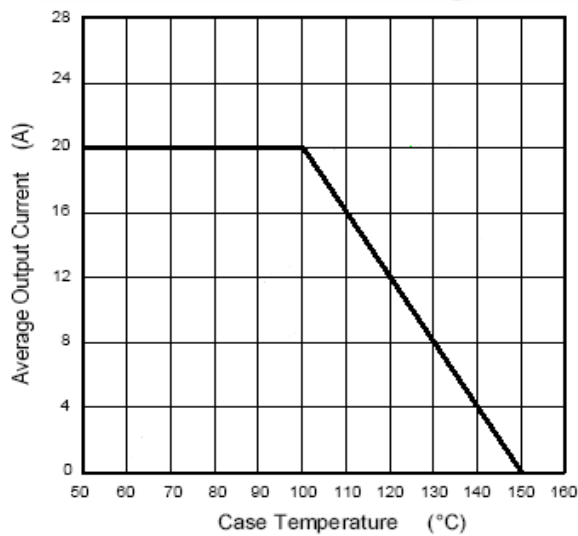
	SYMBOL	FERP20J	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	600	V
Maximum RMS Voltage	Vrms	420	V
Maximum DC blocking Voltage	Vdc	600	V
Maximum Average Forward Rectified at Tc =100°C	If(av)	20.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	125	A
Maximum Forward Voltage at Forward Current at 10A	Vf	1.5	V
Maximum Reverse Recovery Time (Note 1)	Trr	50	nS
Typical thermal resistance junction to case	Rth(jc)	3.0	°C/W
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	10 100	μA
Storage and Operating Temperature Range	Tstg, Tj	-55 to +150	°C

#### Note:

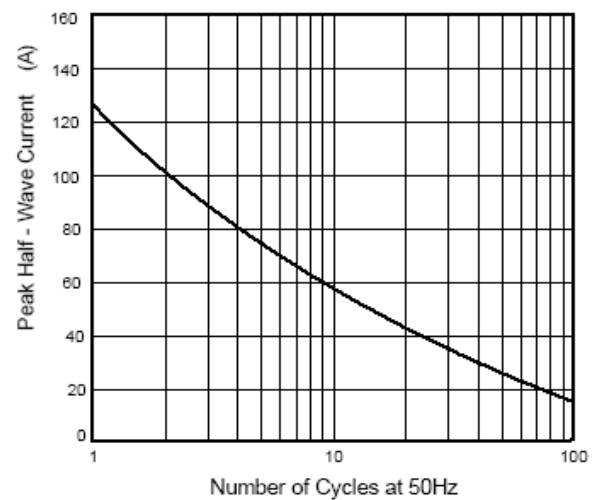
Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A

# RATINGS AND CHARACTERISTIC CURVES FERP20D

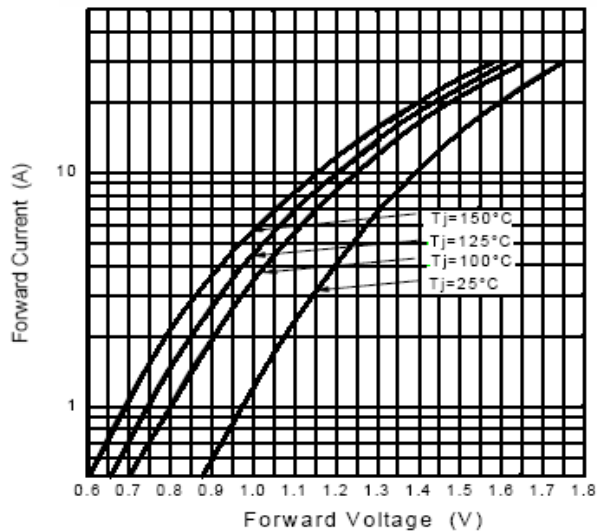
## Forward Current Derating Curve



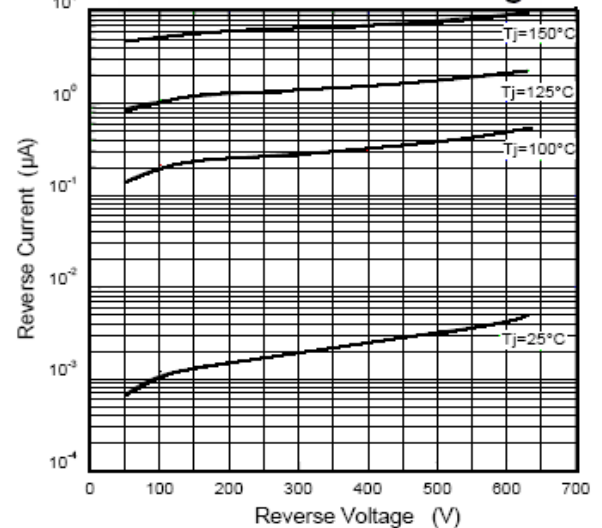
## Maximum Non-Repetitive Peak Forward Surge Current Per Leg



## Typical Instantaneous Forward Characteristics Per Leg



## Typical Reverse Leakage Characteristics Per Leg



## Typical Junction Capacitance Per Leg

