

FERA20D

Ultra fast Plastic Power Rectifiers

VOLTAGE: 200V

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

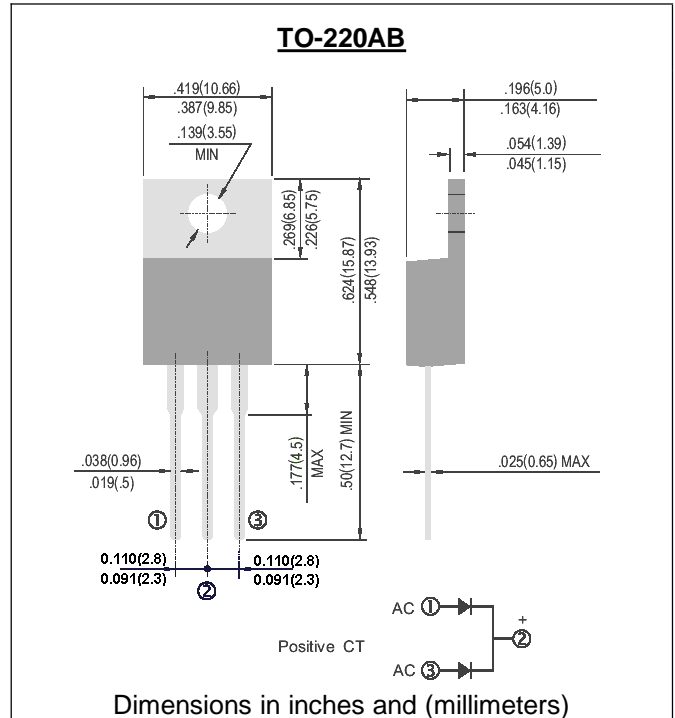
MECHANICAL DATA

Case: JEDEC TO-220 molded plastic body over passivated chip

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

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	FERA20D	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	If(av)	20.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	180	A
Maximum Forward Voltage at Forward Current 10A and 25°C	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 Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	10 100	μA μA
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

Rev.1

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RATINGS AND CHARACTERISTIC CURVES

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Fig. 1 – Forward Current Derating Curve

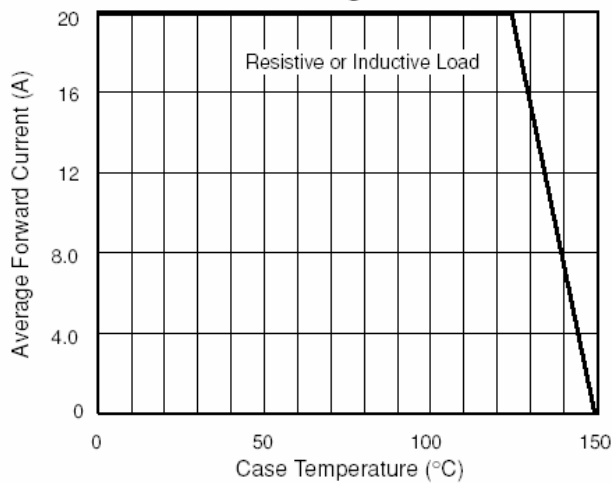


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

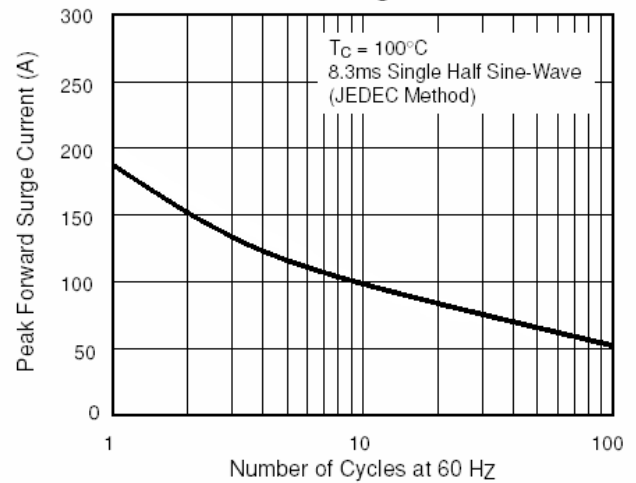


Fig. 3 – Typical Instantaneous Forward Characteristics Per Leg

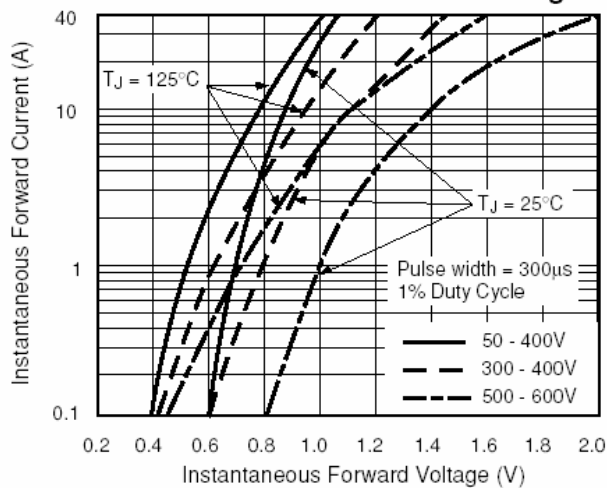


Fig. 4 – Typical Reverse Characteristics Per Leg

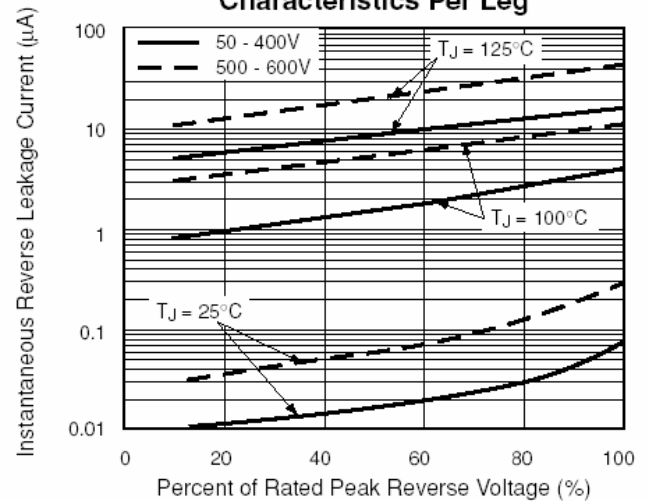


Fig. 5 – Typical Junction Capacitance Per Leg

