

# UGRA20D

## 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

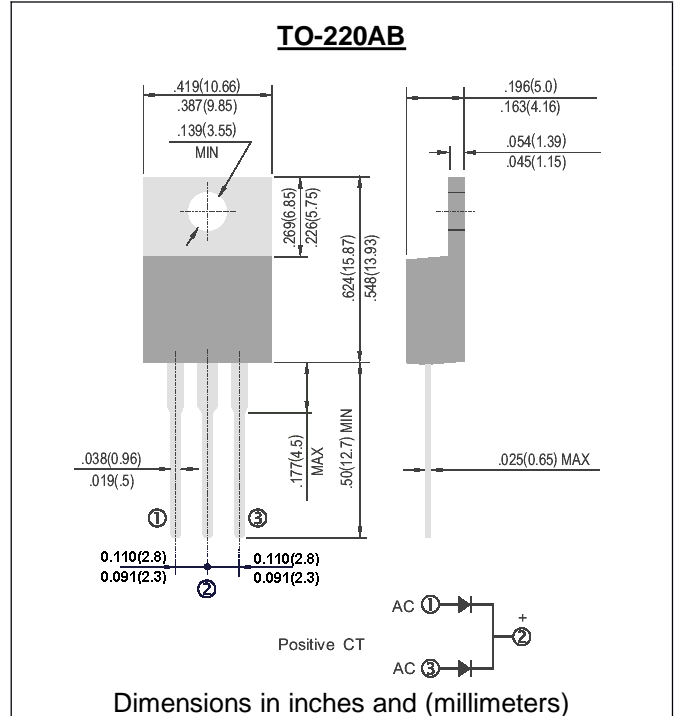
### MECHANICAL DATA

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	UGRA20D	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	200	V
Maximum RMS Voltage	V <sub>rms</sub>	140	V
Maximum DC blocking Voltage	V <sub>d</sub>	200	V
Maximum Average Forward Rectified at T <sub>c</sub> =100°C	I <sub>f(av)</sub>	20.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	125	A
Maximum Forward Voltage at 25°C at 10A	V <sub>f</sub>	0.96	V
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	25	nS
Typical thermal resistance junction to case	R <sub>th(jc)</sub>	2.2	°C/W
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	I <sub>r</sub>	5.0 500	μA
Storage and Operating Temperature Range	T <sub>stg, Tj</sub>	-55 to +150	°C

Note:

Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A

## RATINGS AND CHARACTERISTIC CURVES UGRA20D

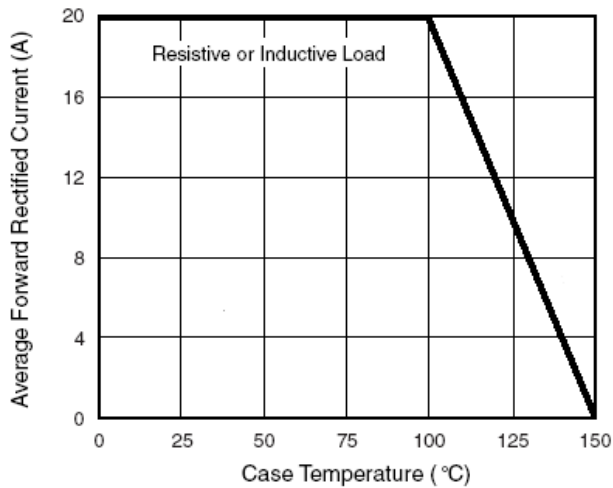


Figure 1. Maximum Forward Current Derating Curve

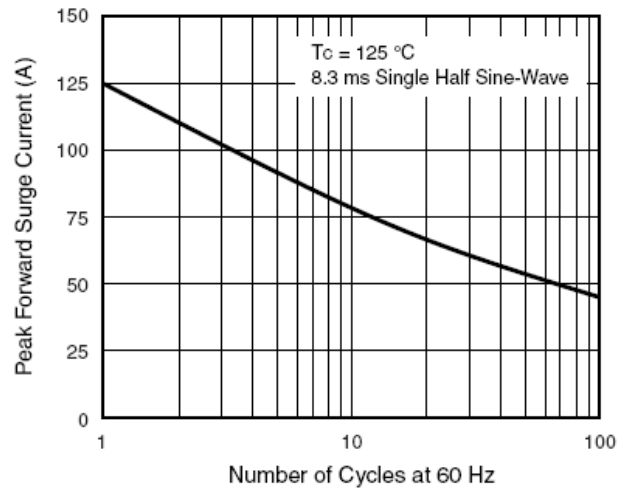


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

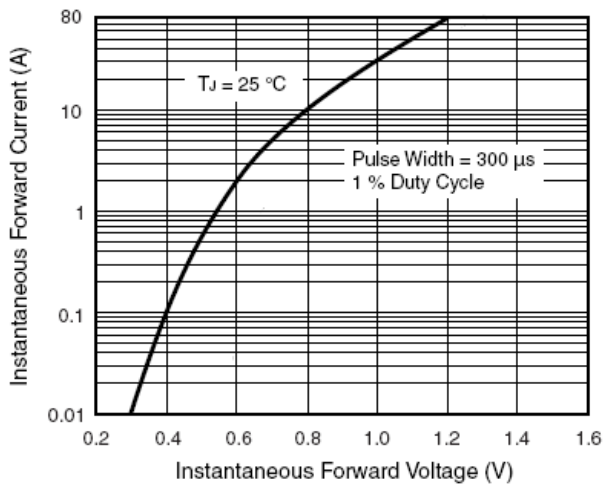


Figure 3. Typical Instantaneous Forward Characteristics Per Diode

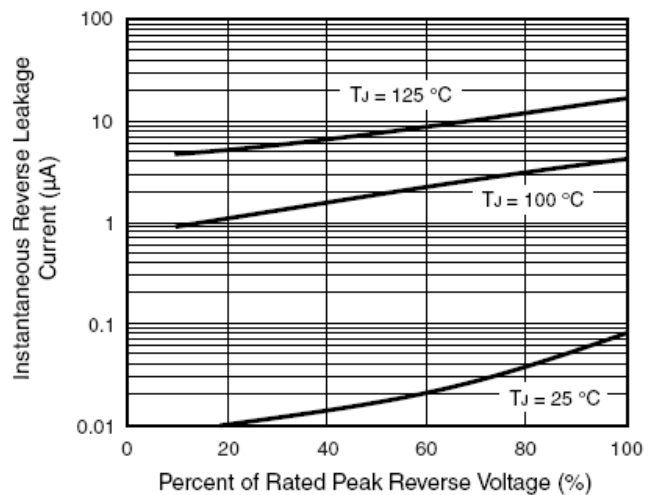


Figure 4. Typical Reverse Leakage Characteristics Per Diode

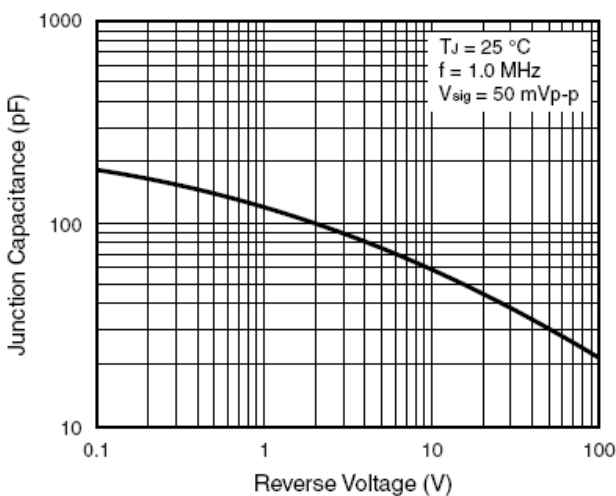


Figure 5. Typical Junction Capacitance Per Diode