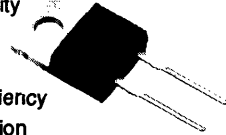


# RS8AT THRU RS8MT

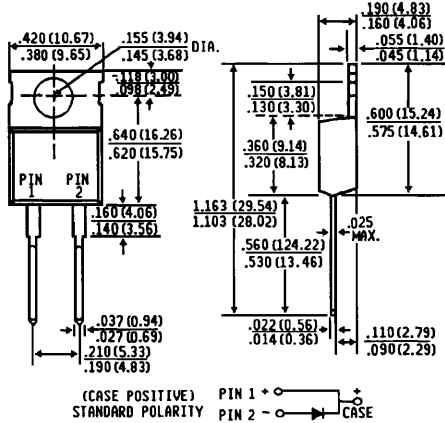
**HIGH CURRENT FAST SWITCHING PLASTIC RECTIFIER**  
**VOLTAGE - 50 to 1000 Volts    CURRENT - 8.0 Amperes**

## FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-O
- ◆ High forward surge capability
- ◆ High current operation
- ◆ Low forward voltage drop
- ◆ Fast switching for high efficiency
- ◆ Glass passivated chip junction
- ◆ High temperature soldering guaranteed:  
265°C/10 seconds/.25", (6.35mm) lead lengths at 5 lbs., (2.3kg) tension



## TO-220



Dimensions in inches and (millimeters)

## MECHANICAL DATA

**Case:** JEDEC TO-220 molded plastic

**Terminals:** Plated Leads solderable per MIL-STD-202, Method 208

**Polarity:** As marked

**Weight:** .08 ounces, 2.224 grams

**Mounting Position:** Any

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

	SYMBOLS	RS8 AT	RS8 BT	RS8 DT	RS8 GT	RS8 JT	RS8 KT	RS8 MT	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T <sub>C</sub> = 100°C	I <sub>(AV)</sub>	8.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150							Amps
Maximum Instantaneous Forward Voltage at 8.0A	V <sub>F</sub>	1.3							Volts
Maximum Reverse Current T <sub>J</sub> = 25°C at Rated DC Blocking Voltage T <sub>C</sub> = 100°C	I <sub>R</sub>	10.0				250			µA
Maximum Reverse Recovery Time (Note 2) T <sub>J</sub> = 25°C	T <sub>RR</sub>	150		200		250	500		ns
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	55							pf
Typical Thermal Resistance (Note 3)	R <sub>θJC</sub>	3.0							°C/W
Operating and Storage Temperature Range,	T <sub>J</sub> , T <sub>STG</sub>	-50 to +150							°C

### NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 V<sub>DC</sub>.
2. Reverse Recovery Test Conditions : I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = .25A.
3. Thermal Resistance from Junction to Case attached to heat sink.

# RATINGS AND CHARACTERISTIC CURVES RS8AT THRU RS8MT

