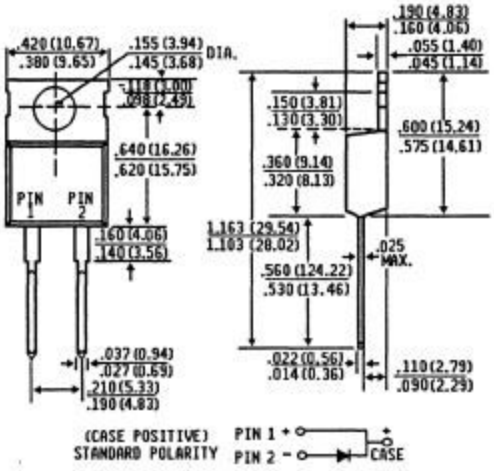
RS8AT THRU RS8MT

HIGH CURRENT FAST SWITCHING PLASTIC RECTIFIER

***VOLTAGE** - 50 to 1000 Volts* ***CURRENT** - 8.0 Amperes*

FEATURES

TO-220



Dimensions in inches and (millimeters)

- 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

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_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T_C = 100°C	$I_{(AV)}$	8.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							Amps
Maximum Instantaneous Forward Voltage at 8.0A	V_F	1.3							Volts
Maximum Reverse Current T_J = 25°C at Rated DC Blocking Voltage T_C = 100°C	I_R	10.0 250							μA
Maximum Reverse Recovery Time (Note 2) T_J = 25°C	T_{RR}	150			200	250		500	ns
Typical Junction Capacitance (Note 1)	C_J	55							pf
Typical Thermal Resistance (Note 3)	RΘJC	3.0							°C/W
Operating and Storage Temperature Range,	T_J,T_{STG}	-50 to +150							°C

NOTES:
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 V_{DC}.
2. Reverse Recovery Test Conditions : I_F = 0.5A, I_R = 1.0A, I_{rr} = .25A.
3. Thermal Resistance from Junction to Case attached to heat sink.