



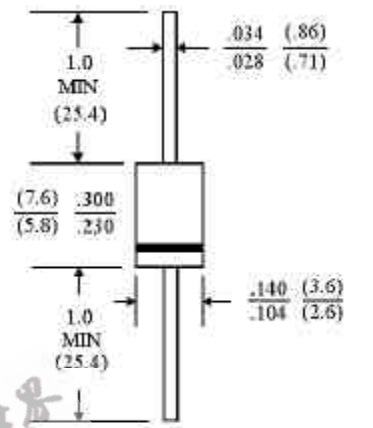
# TS 150 THRU TS 1510

GLASS PASSIVATED JUNCTION PLASTIC RECTIFIER  
 VOLTAGE - 50 to 1000 Volts CURRENT - 1.5 Amperes

## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound
- 1.5 ampere operation at  $T_A=55\text{ }^\circ\text{C}$  with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- Glass passivated junction

## DO-15



## MECHANICAL DATA

- Case: Molded plastic, DO-15
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode
- Mounting Position: Any
- Weight: 0.015 ounce, 0.4 gram

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25  $^\circ\text{C}$  ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

	TS150	TS151	TS152	TS154	TS156	TS158	TS1510	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at $T_A=55\text{ }^\circ\text{C}$	1.5							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	50							A
Maximum Forward Voltage at 1.5A	1.1							V
Maximum Reverse Current $T_a=25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_a=100\text{ }^\circ\text{C}$	5.0							$\mu\text{gA}$
Typical Junction capacitance (Note 1)	25							pF
Typical Thermal Resistance (Note 2) R $\theta$ JKJA	45.0							$^\circ\text{C/W}$
Operating and Storage Temperature Range $T_A$	-55 TO +150							$^\circ\text{C}$

## NOTES:

- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- Thermal Resistance from Junction to Ambient and from junction to lead at 0.375"(9.5mm) lead length P.C.B mounted.

RATING AND CHARACTERISTIC CURVES  
 TS 150 THRU TS 1510

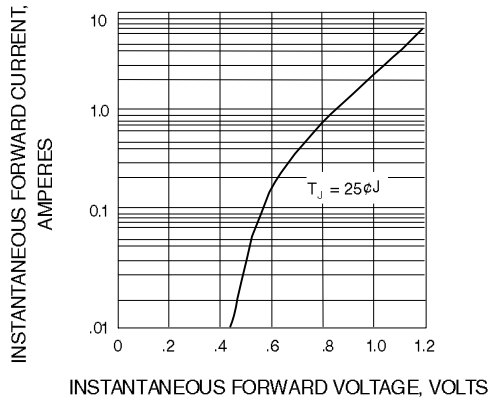


Fig. 1-TYPICAL FORWARD CHARACTERISTICS

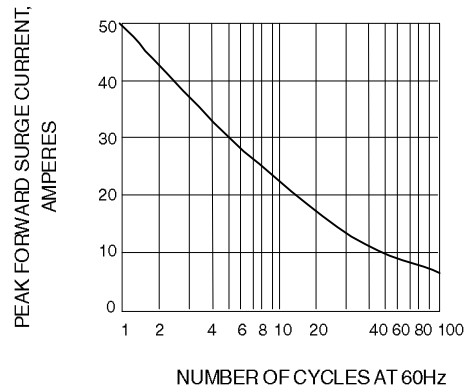


Fig. 2-PEAK FORWARD SURGE CURRENT

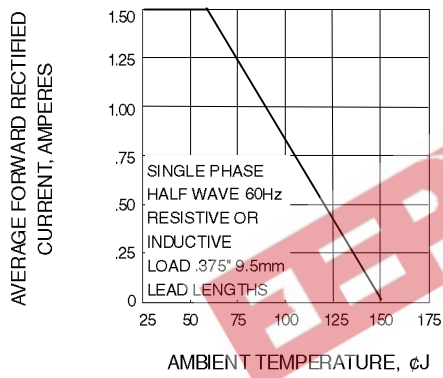


Fig. 3-FORWARD CURRENT DERATING CURVE

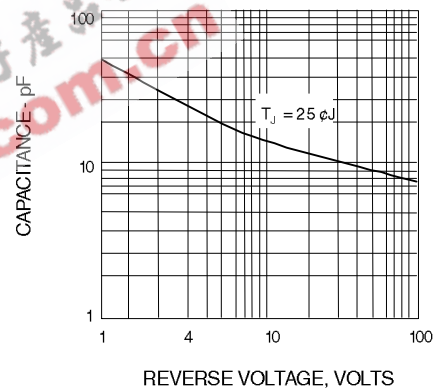


Fig. 4-TYPICAL JUNCTION CAPACITANCE