

# TS 150 THRU TS 1510

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

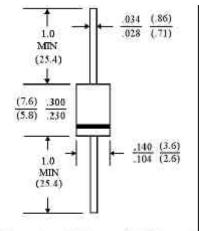
#### **FEATURES**

<u>DO-15</u>

Plastic package has Underwriters Laboratory Flammab ity Classification 94V-O ut izing Flame Retardant Epoxy Molding Compound 1.5 ampere operation at  $T_A$ =55 ¢J with no thermal runaway Exceeds environmental standards of MIL-S-19500/228 Glass passivated junction

#### 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



Dimensions in inches and (millimeters)

# MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ¢J ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

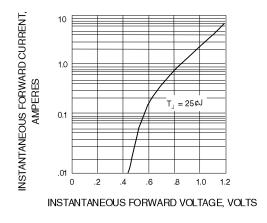
For capacitive load, derate current by 20%.

Tor capacitive load, derate current by 2070.								
	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	1.5							Α
Current .375"(9.5mm) Lead Length at								
T <sub>A</sub> =55 ¢J								
Peak Forward Surge Current 8.3ms single	50							Α
half sine-wave superimposed on rated load								
(JEDEC method)								
Maximum Forward Voltage at 1.5A	1.1							V
Maximum Reverse Current T <sub>a</sub> =25 ¢J	5.0							£gA
at Rated DC Blocking Voltage $T_a$ =100 ¢J	50							£gA
Typical Junction capacitance (Note 1)	25							PF
Typical Thermal Resistance (Note 2) R £KJA	45.0							¢J/W
Operating and Storage Temperature Range	-55 TO +150							¢J
T <sub>A</sub>								

## NOTES:

- 1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2. 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

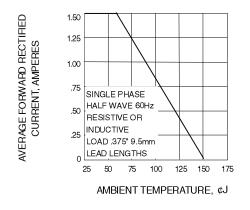
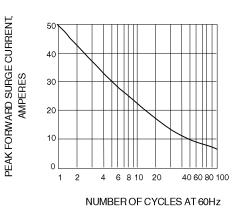


Fig. 3-FORWARD CURRENT DERATING CURVE



### Fig. 2-PEAK FORWARD SURGE CURRENT

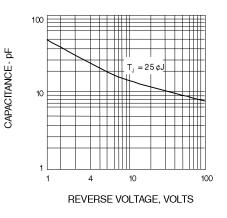


Fig. 4-TYPICAL JUNCTION CAPACITANCE