



TS750 THRU TS758

6.0 AMPS. Silicon Rectifiers



Voltage Range
50 to 800 Volts
Current
6.0 Amperes

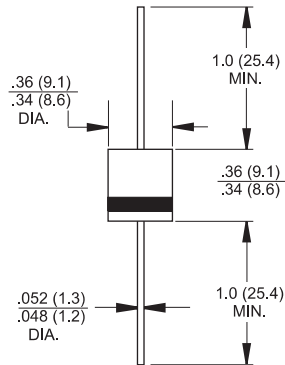
Features

- ✧ Plastic material used carries Underwriters Laboratory Classification 94V-0
- ✧ High forward current capability
- ✧ Diffused junction
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed: 260°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

Mechanical Data

- ✧ Cases: Molded plastic body
- ✧ Lead: Plated axial leads, solderable per MIL-STD-750, Method 2026
- ✧ Polarity: Color band denotes cathode end
- ✧ Mounting position: Any
- ✧ Weight: 0.07 ounce, 2.1 grams

P600



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating 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%

Type Number	Symbol	TS750	TS751	TS752	TS754	TS756	TS758	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	V
Maximum Non-repetitive Peak Reverse Voltage	V_{BR}	60	120	240	480	720	1200	V
Maximum Average Forward Rectified Current at $T_A = 60^\circ\text{C}$, P.C.B. Mounting (Fig. 1) $T_L = 60^\circ\text{C}$, 0.125" (3.18mm) Lead Length (Fig. 2)	$I_{(AV)}$	6.0 22.0						A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	400						A
Maximum Instantaneous Forward Voltage @ 6.0A @ 100A	V_F	0.95 1.25						1.30 V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_R	5.0 1000						μA μA
Typical Junction Capacitance (Note 1)	C_j	150						pF
Typical Thermal Resistance (Note 2)	$R\theta_{JA}$ $R\theta_{JL}$	20.0 4.0						$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	-50 to +150						$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-50 to +150						$^\circ\text{C}$

Notes: 1. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0 Volts
2. Mount on Cu-Pad Size 16mm x 16mm on P.C.B.

RATINGS AND CHARACTERISTIC CURVES (TS750 THRU TS758)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

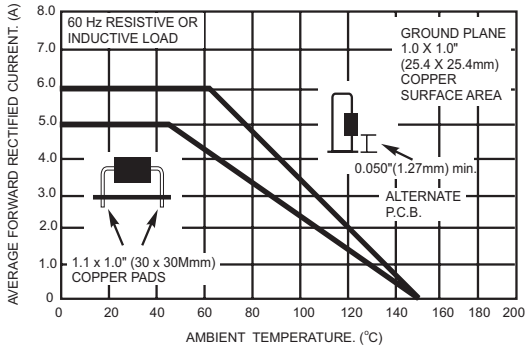


FIG. 2- MAXIMUM FORWARD CURRENT DERATING CURVE

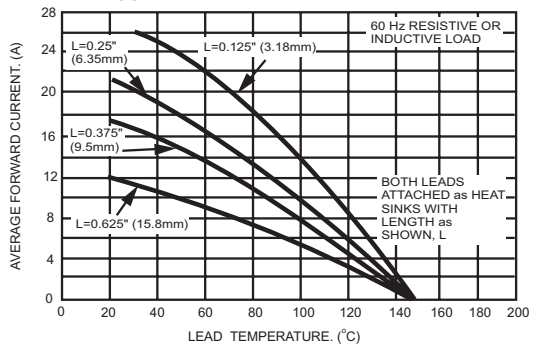


FIG. 3- TYPICAL REVERSE CHARACTERISTICS

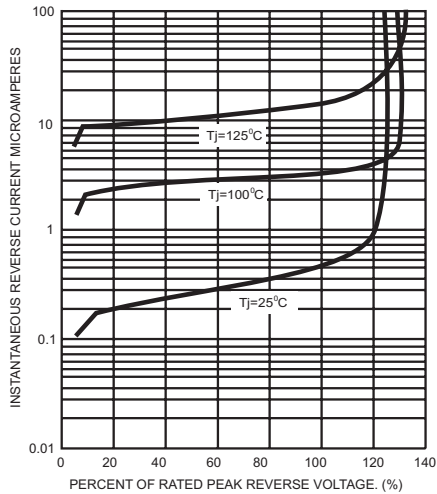


FIG. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

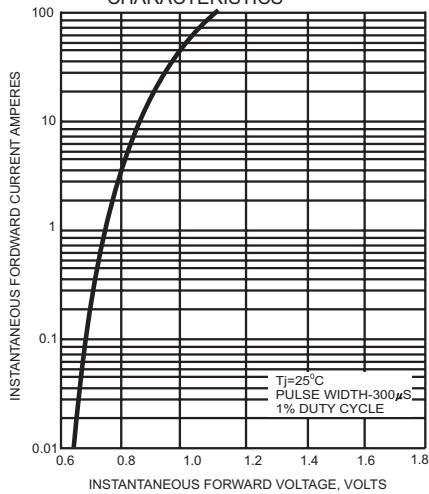


FIG. 5- MAXIMUM PEAK FORWARD SURGE CURRENT

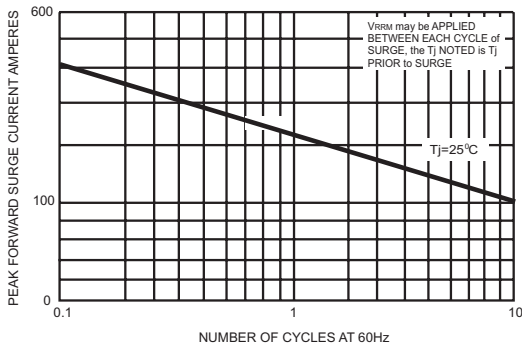


FIG. 6- TYPICAL TRANSIENT THERMAL IMPEDANCE

