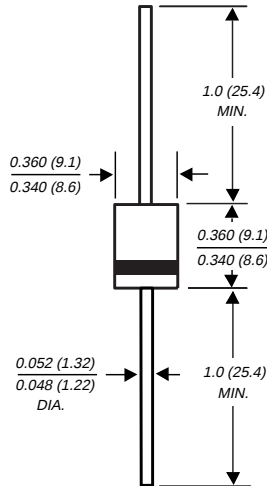


GI750 THRU GI758

HIGH CURRENT PLASTIC RECTIFIER

Reverse Voltage - 50 to 800 Volts Forward Current - 6.0 Amperes

Case style P600



Dimensions are in inches and (millimeters)

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ High forward current capability
- ◆ Diffused junction
- ◆ Construction utilizes void-free molded plastic technique
- ◆ High surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension



MECHANICAL DATA

Case: Void-free molded plastic body

Terminals: 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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	GI750	GI751	GI752	GI754	GI756	GI758	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	Volts
Maximum non-repetitive peak reverse voltage	V _{RSM}	60	120	240	480	720	1200	Volts
Maximum average forward rectified current at T _A =60°C, P.C.B. mounting (FIG. 1) T _L =60°C, 0.125" (3.18mm) lead length (FIG. 2)	I <sub(av)< sub=""></sub(av)<>	6.0 22.0						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	400.0						Amps
Maximum instantaneous forward voltage at 6.0A 100A	V _F	0.90 1.25					0.95 1.30	Volts
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	5.0 1.0						μA mA
Typical junction capacitance (NOTE 1)	C _J	150.0						pF
Typical reverse recovery time (NOTE 2)	t _{rr}	2.5						μs
Typical thermal resistance (NOTE 3)	R _{θJA} R _{θJL}	20.0 4.0						°C/W
Operating junction 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 Volts

(2) Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A

(3) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted with 1.1 x 1.1" (30 x 30mm) copper pads

RATINGS AND CHARACTERISTIC CURVES G1750 THRU G1758

FIG.1 - MAXIMUM FORWARD CURRENT DERATING CURRENT

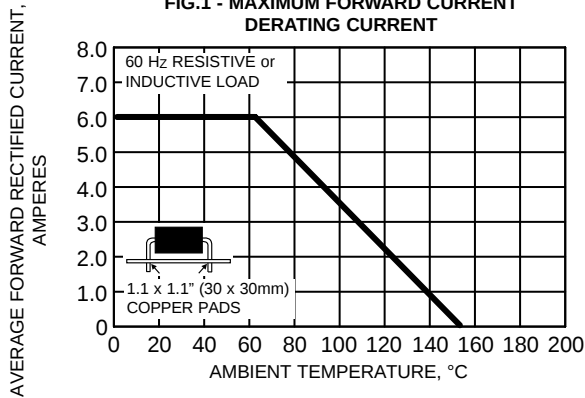


FIG. 2 - MAXIMUM FORWARD CURRENT DERATING CURVE

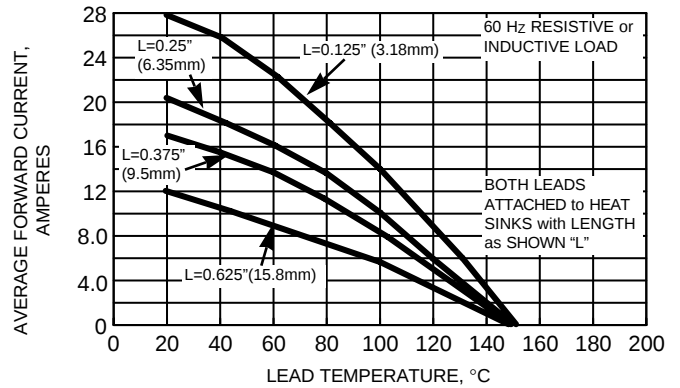


FIG. 3 - MAXIMUM PEAK FORWARD SURGE CURRENT

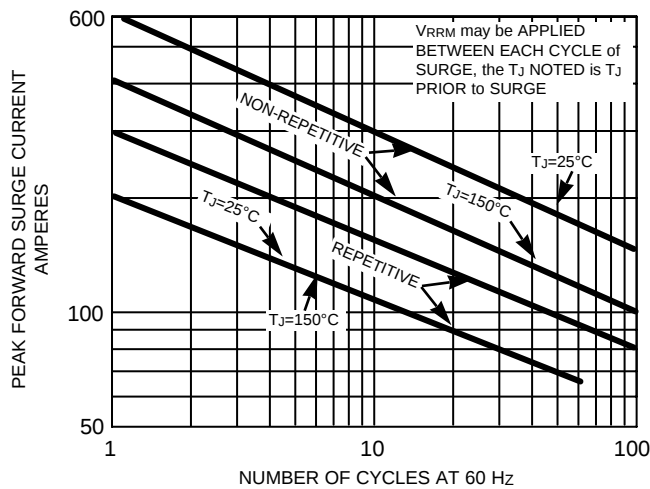


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

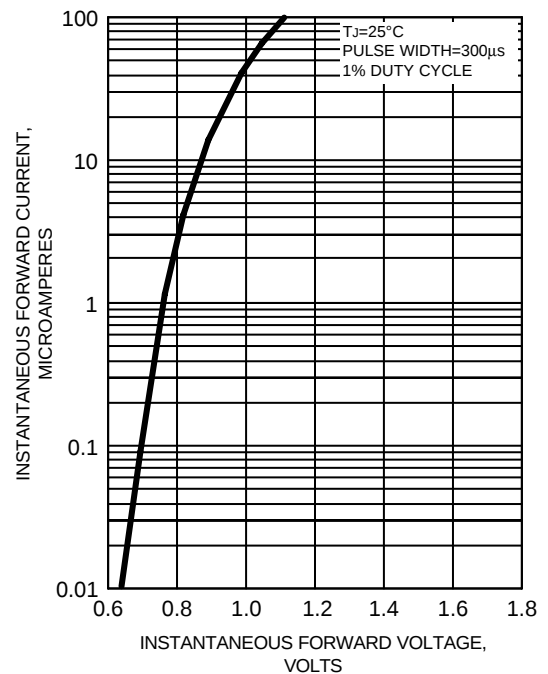


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

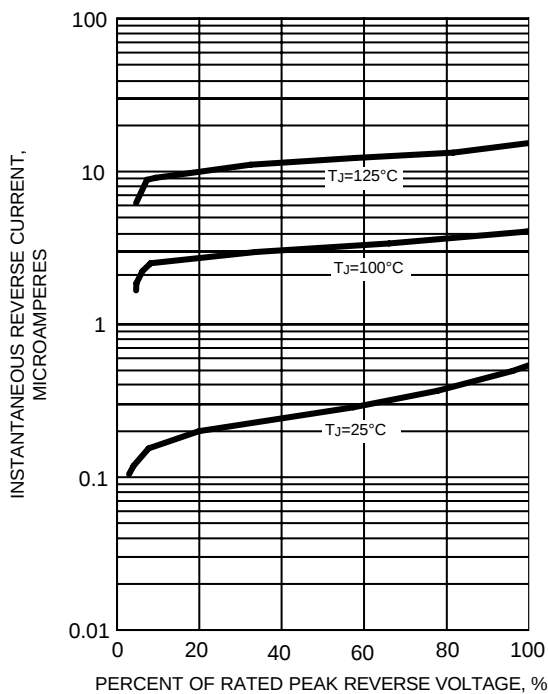


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

