

Silicon Diode

GI750

50V / 6A

DATASHEET

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OEM – General Semiconductor

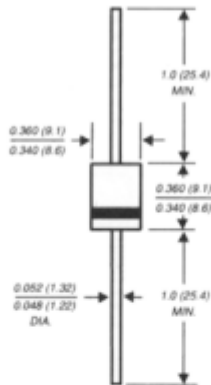
Source: General Semiconductor Databook 1998

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	VRRM	50	100	200	400	600	800	Volts
Maximum RMS voltage	VRMS	35	70	140	280	420	560	Volts
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	Volts
Maximum non-repetitive peak reverse voltage	VRSM	60	120	240	480	720	1200	Volts
Maximum average forward rectified current at TA=60°C, P.C.B. mounting (FIG. 1) TL=60°C, 0.125" (3.18mm) lead length (FIG. 2)	IF(AV)	6.0 22.0						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	400.0						Amps
Maximum instantaneous forward voltage at 6.0A 100A	VF					0.90 1.25	0.95 1.30	Volts
Maximum DC reverse current at rated DC blocking voltage TA=25°C TA=100°C	IR					5.0 1.0		µA mA
Typical junction capacitance (NOTE 1)	CJ					150.0		pF
Typical reverse recovery time (NOTE 2)	trr					2.5		µs
Typical thermal resistance (NOTE 3)	REJA REJL					20.0 4.0		°C/W
Operating junction and storage temperature range	TJ, TSTG					-50 to +150		°C

NOTES:

- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (2) Reverse recovery test conditions: IF=0.5A, IR=1.0A, Itr=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 GI750 THRU GI758

