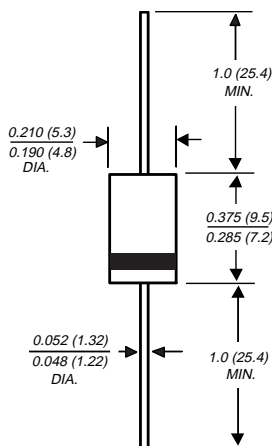


GI850 THRU GI858

FAST SWITCHING PLASTIC RECTIFIER

Reverse Voltage - 50 to 800 Volts Forward Current - 3.0 Amperes

DO-201AD



Dimensions in inches and (millimeters)

FEATURES

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

MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.04 ounce, 1.1 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	GI850	GI851	GI852	GI854	GI856	GI858	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	510	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	Volts
Maximum non-repetitive peak reverse voltage	V _{RSM}	75	150	250	450	650	880	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at T _A =90°C	I _(AV)	3.0						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	100.0						Amps
Maximum instantaneous forward voltage at: 3.0A 9.4A, T _J =175°C	V _F	1.25 1.10						Volts
Maximum DC reverse current at rated DC blocking voltage T _A =25°C T _A =100°C	I _R	10.0						μA
		150	150	200	250	300	500	
Typical junction capacitance (NOTE 1)	C _J	28.0						pF
Maximum reverse recovery time (NOTE 2)	t _{rr}	200.0						ns
Maximum reverse recovery current (NOTE 2)	I _{RM(REC)}	2.0						Amps
Typical thermal resistance (NOTE 3)	R _{θJA} R _{θJL}	22.0 8.0						°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=1.0A, V_R=30V, di/dt=50A/μs, and I_{rr}=10% I_{RM} for measurement of t_{rr}

(3) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, with both leads equally heat sink

RATINGS AND CHARACTERISTIC CURVES G1850 THRU G1858

