



ELECTRONICS, INC.
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GI750 thru GI758 6 Amp Plastic Silicon Rectifier

Features:

- Low Forward Voltage Drop
- Low Leakage Current, I_R less than 0.1 μ A
- High Forward Current Capability
- High Forward Surge Capability

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Maximum Repetitive Peak Reverse and Blocking Voltage, V_{RRM} , V_{DC}	
GI750	50V
GI751	100V
GI752	200V
GI754	400V
GI756	600V
GI758	800V
Maximum RMS Voltage, V_{RMS}	
GI750	35V
GI751	70V
GI752	140V
GI754	280V
GI756	420V
GI758	560V
Maximum Non-Repetitive Peak Reverse Voltage, V_{RSM}	
GI750	60V
GI751	120V
GI752	240V
GI754	480V
GI756	720V
GI758	1200V
Maximum Average Forward Rectified Current ($T_A = +60^\circ\text{C}$), $I_{F(AV)}$	
PC Board Mounting	6A
.125" (3.18mm) Lead Length	22A
Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load) ...	
400A	
Operating Junction Temperature Range, T_J	
-65° to +175°C	
Storage Temperature Range, T_{stg}	
-65° to +175°C	
Typical Thermal Resistance (Note 1)	
Junction-to-Ambient, R_{thJA}	20°C/W
Junction-to-Lead, R_{thJL}	4.0°C/W

Note 1. Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, PB board mounted with 1.1" x 1.1" (30mm x 30mm) copper pads.

Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit	
Instantaneous Forward Voltage GI750 thru GI756	V_F	$I_F = 6\text{A}$	-	-	0.90	V	
		$I_F = 100\text{A}$	-	-	1.25	V	
		GI758	$I_F = 6\text{A}$	-	-	0.95	V
			$I_F = 100\text{A}$	-	-	1.30	V
DC Reverse Current	I_R	At Rated V_{DC}	$T_A = +25^\circ\text{C}$	-	-	5.0	μA
			$T_A = +100^\circ\text{C}$	-	-	1.0	mA
Reverse Recovery Time	t_{rr}	$I_F = 0.5\text{A}, I_R = 1\text{A}, I_{rr} = 0.25\text{A}$	-	2.5	-	μs	
Junction Capacitance	C_J	4V, 1MHz	-	150	-	pF	

