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 0.1μA
- High Forward Current Capability
- High Forward Surge Capability

Absolute Maximum Ratings: (T_A = +25°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°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°C unless otherwise specified)

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