

SDA 627

10 AMP RECTIFIER ASSEMBLY

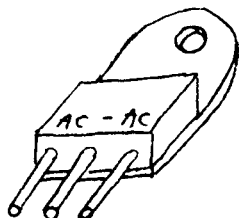
CENTER TAP ULTRA FAST RECOVERY

50 - 300 VOLTS



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CASE STYLE



FEATURES

- ULTRA FAST RECOVERY 40 NSEC MAX
- PIV TO 300 VOLTS PER LEG
- HIGH SURGE 125 AMPS
- ELECTRICALLY ISOLATED CASE
- HERMETICALLY SEALED DISCRETES
- INTEGRAL HEAT SINK

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Per Leg and DC Blocking Voltage Per Leg	$V_{RM} (rep)$ V_R	50 100 150 200 250 300	Volts
RMS Reverse Voltage Per Leg	V_r	35 70 105 140 175 210	Volts
Half Wave Rectified Forward Current, Averaged Over Full Cycle (Resistive Load, 60Hz, Sine Wave, $T_C = 55^\circ C$)	I_O	10	Amp
Peak Repetitive Forward Current ($T_C = 55^\circ C$, 8.3 ms Pulse, Allow Junction to Reach Equilibrium Between Pulses)	$I_{FM} (rep)$	40	Amp
Peak Surge Current ($T_C = 55^\circ C$, Superimposed on Rated Current at Rated Voltage, 8.3 ms Pulse)	$I_{FM} (surge)$	125	Amp
Operating and Storage Temperature	T_J, T_{stg}	-65 to +150	$^\circ C$

THERMAL CHARACTERISTICS

Characteristics	Symbol	Max	Unit
Thermal Resistance, Junction to Case	$R_{\theta JC}$	6.0	$^\circ C/W$

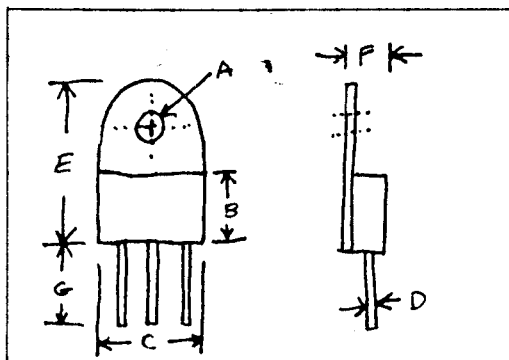
ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Value	Unit
Max Full Cycle Forward Voltage Drop, Averaged Over Full Cycle, <i>Per Leg</i> (I_O (Max), 60 Hz, Square Wave, $T_C = 55^\circ\text{C}$)	$V_{F(AV)}$	.5	Volts
Max Instantaneous Forward Voltage Drop <i>Per Leg</i> ($I_F = 6$ Amps, $T_C = 25^\circ\text{C}$, 300 us Pulse)	V_F	.95	Volts
Max Full Cycle Reverse Leakage Current, Averaged Over Full Cycle, <i>Per Leg</i> (Rated V_R , 60Hz, Square Wave, $T_C = 100^\circ\text{C}$)	$I_{R(AV)}$	1.0	mA
Max Reverse Leakage Current <i>Per leg</i> (Rated V_R , $T_C = 25^\circ\text{C}$)	I_R	20	uA
Max Junction Capacitance <i>Per Leg</i> ($V_R = 10$ V, $T_C = 25^\circ\text{C}$)	C_J	100	pf

REVERSE RECOVERY CHARACTERISTICS

Characteristics	Symbol	Min	Typ	Max	Unit
Reverse Recovery Time ($I_F = 500\text{ma}$, $I_R = 1\text{A}$, $I_{RR} = 250\text{ma}$)	t_{rr}	—	—	40	ns

PHYSICAL DIMENSIONS



KEY TO DIMENSIONS:

(Inches)

- A = .150 REF.
- B = .40 REF.
- C = .62 REF.
- D = .030 REF.
- E = .65 REF.
- F = .250 REF.
- G = TBD

SSDI SOLID STATE DEVICES, INC.