



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638

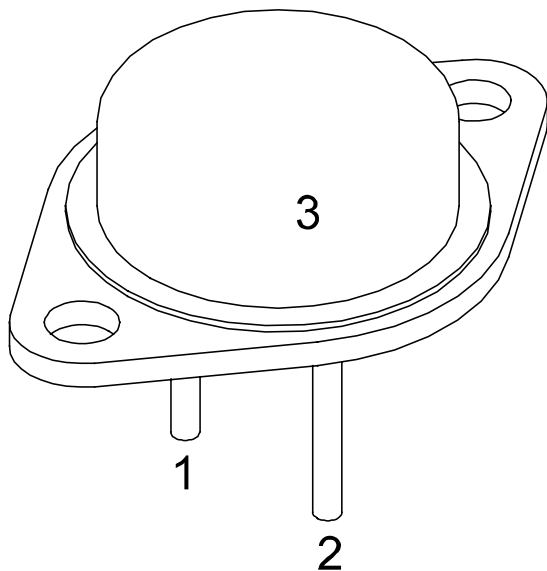
Phone: (562) 404-7855 * Fax: (562) 404-1773

ssdi@ssdi-power.com * www.ssdi-power.com

SHA2952TX

20A 35nsec 400 V Hyper Fast Positive Centertap Rectifier

DESIGNER'S DATA SHEET



Features:

- Hyper Fast Recovery: 35nsec Maximum
- High Surge Rating
- Low Reverse Leakage Current
- Low Junction Capacitance
- Hermetically Sealed
- Eutectic Die Attach
- Enhanced Replacement for UES2604-06 series
- High Reliability Device, Screened to 25 Temperature Cycles (-55 to +175°C) and 48 hrs of HTRB (320V, 150°C)

Maximum Ratings, per leg	Symbol	Value	Units
Peak Repetitive Reverse Voltage	V_{RRM}	400	Volts
Average Rectified Forward Current (Resistive Load, 60 Hz Sine Wave, $T_C = 100^\circ\text{C}$)	I_o Total	20	Amps
Peak Surge Current ^{1/} (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$)	I_{FSM}	200	Amps
Operating & Storage Temperature	$T_{OP} \& T_{STG}$	-65 to +200	°C
Maximum Total Thermal Resistance Junction to Case	$R_{\theta JC}$ Per Leg Both Legs Tied	2.4 1.2	°C/W

SHA2952TX HiRel Screening per MIL-PRF-19500, Table IV, JANTX level:

- Temperature Cycling i.a.w. MIL-STD-750 Method 1051 Condition C
- High Temperature Reverse Bias i.a.w. MIL-STD-750 Method 1038, 48 hrs minimum
- Hermeticity i.a.w. MIL-STD-750 Method 1071

Notes: 1/ per leg

NOTE: All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: RC0095B

DOC



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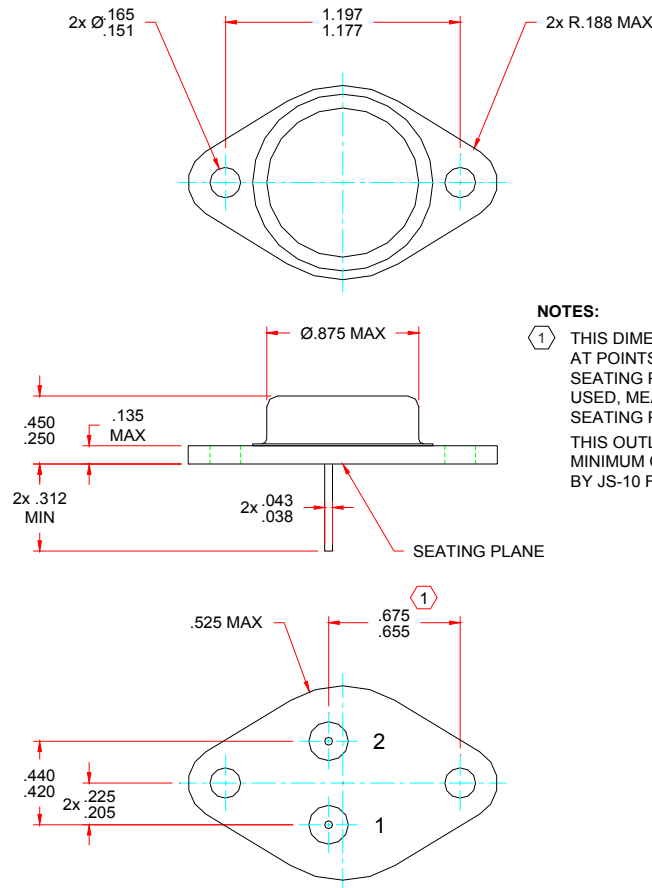
SHA2952TX

Electrical Characteristic, per leg		Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop ($I_F = 15A$, Pulse)	$T_A = 25\text{ }^\circ\text{C}$	V_{F1}	—	1.25	V_{DC}
Instantaneous Forward Voltage Drop ($I_F = 15A$, Pulse)	$T_A = 125\text{ }^\circ\text{C}$	V_{F2}	—	1.15	V_{DC}
Reverse Leakage Current (100% of rated V_R , Pulse)	$T_A = 25\text{ }^\circ\text{C}$ $T_A = 100\text{ }^\circ\text{C}$	I_{R1} I_{R2}	— —	50 10	μA mA
Reverse Recovery Time ($I_F = 0.5A$, $I_R = 1A$, $I_{RR} = 0.25A$, $T_A = 25^\circ\text{C}$)		t_{RR}	—	35	nsec
Junction Capacitance ($V_R = 10V_{DC}$, $T_A = 25^\circ\text{C}$, $f = 1\text{MHz}$)		C_J	—	80	pF

NOTES: 1/ For Ordering Information, Price, and Availability Contact Factory.

Available Part Numbers: SHA2952TX	PIN ASSIGNMENT			
	PACKAGE	Pin 1	Pin 2	Case
	TO-3	Anode 1	Anode 2	Cathode

TO-3:



NOTES:

① THIS DIMENSION SHALL BE MEASURED AT POINTS .050 - .055" BELOW THE SEATING PLANE. WHEN GAGE IS NOT USED, MEASUREMENT WILL BE MADE AT SEATING PLANE.

THIS OUTLINE DOES NOT MEET THE MINIMUM CRITERIA ESTABLISHED BY JS-10 FOR REGISTRATION.