

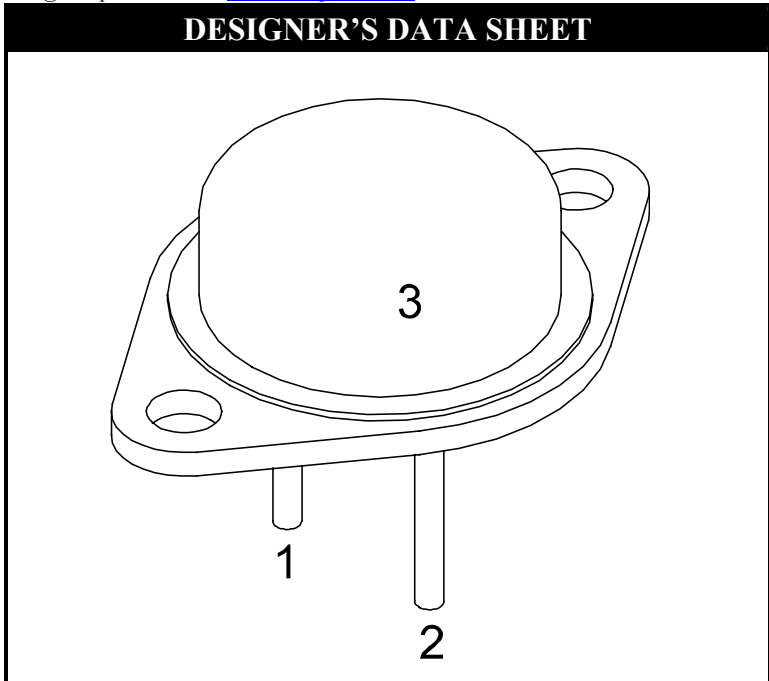


Solid State Devices, Inc.

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



- 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



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638

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

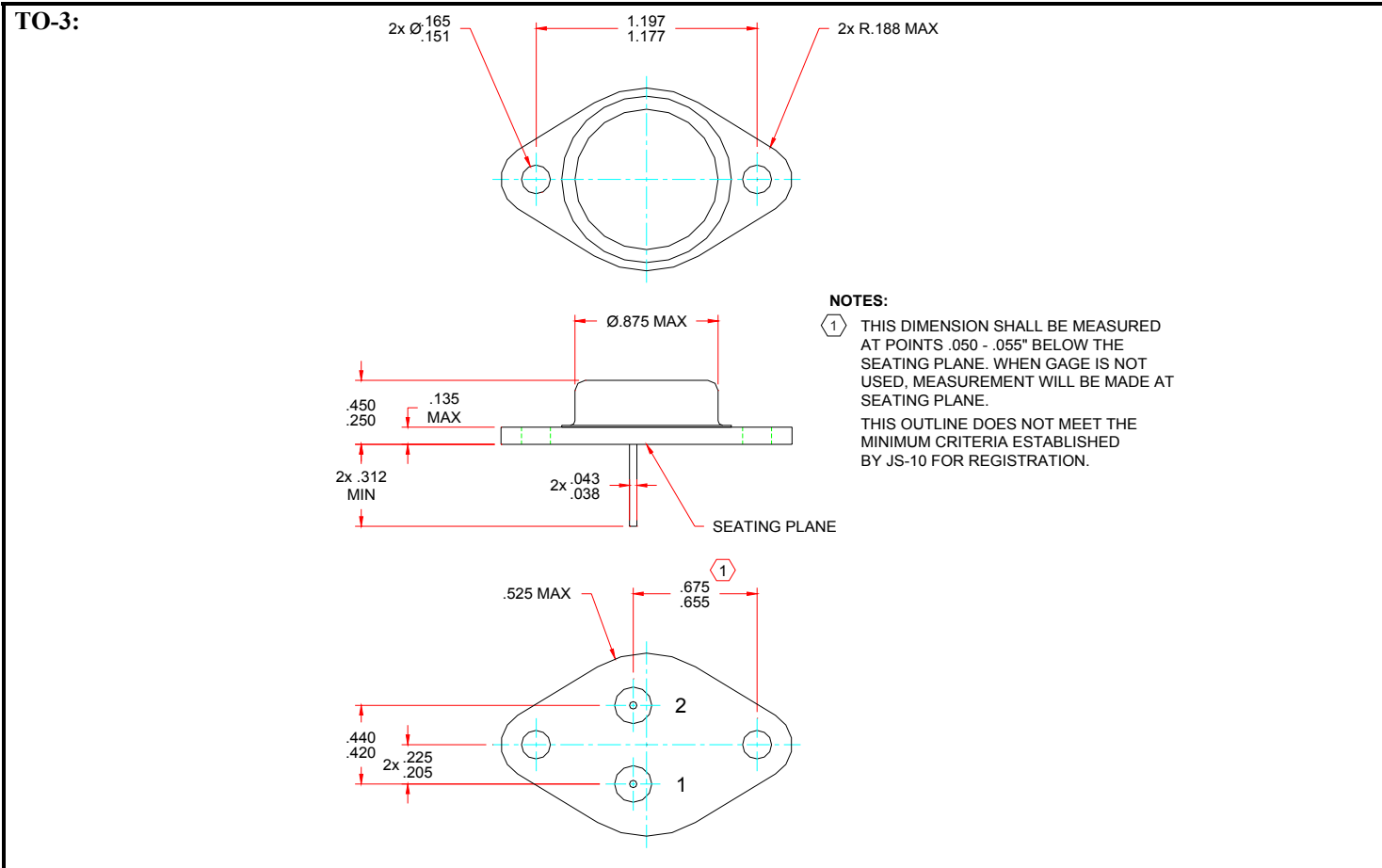
ssdi@ssdi-power.com * www.ssdi-power.com

SHA2952TX

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

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

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



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
--	------------------------------	------------