



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
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SSR1045J

Designer's Data Sheet

Part Number / Ordering Information^{1/}

SSR 10 45

Screening^{2/}

— = Not Screened

TX = TX Level

TXV = TXV Level

S = S Level

Lead Bend Options

— = Straight

DB = Down Bend

UB = Up Bend

Package J = TO-257

Voltage 45 = 45 V

Current 10 = 10 A

10 AMP SCHOTTKY RECTIFIER 45 VOLTS

FEATURES:

- Low Reverse Leakage
- Low Forward Voltage Drop
- Guard Ring for Overvoltage Protection
- Isolated Hermetically Sealed Package
- Custom Lead Forming Available
- Eutectic Die Attach
- 175°C Operating Temperature
- TX, TXV, and S Level Screening Available - Consult Factory^{2/}

MAXIMUM RATINGS ^{3/}		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage		V_{RRM} V_{RWM} V_R	45	Volts
Average Rectified Forward Current (Resistive load, 60 Hz, sine wave, $T_A = 25^\circ\text{C}$)		I_O	10	Amps
Peak Surge Current (8.3 ms pulse, half sine wave superimposed on I_O , allow junction to reach equilibrium between pulses, $T_A = 25^\circ\text{C}$)		I_{FSM}	150	Amps
Operating & Storage Temperature		T_{OP} & T_{stg}	-65 to +175	°C
Maximum Thermal Resistance (Junction to Case)		$R_{\theta JC}$	1.5	°C/W

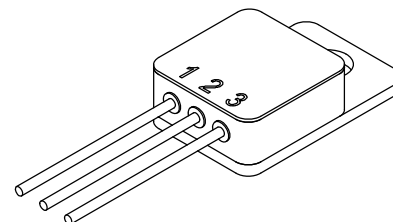
NOTES:

^{1/} For ordering information, price, and availability - contact factory.

^{2/} Screening based on MIL-PRF-19500. Screening flows available on request.

^{3/} Unless otherwise specified, all electrical characteristics @25°C.

TO-257 (J)



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

DATA SHEET #: RS0133B

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ELECTRICAL CHARACTERISTICS (per leg) ^{3/}		Symbol	Typ	Max	Units
Instantaneous Forward Voltage Drop (T _A =25°C, 300 µsec pulse)	I _F = 5 A	V _{F1}	0.485	0.52	V _{DC}
	I _F = 10 A	V _{F2}	0.56	0.60	
Instantaneous Forward Voltage Drop (T _A =-55°C, 300 µsec pulse)	I _F = 5 A	V _{F3}	--	0.61	V _{DC}
Reverse Leakage Current (Rated V _R , T _A = 25°C, 300 µsec pulse minimum)		I _{R1}	--	100	µA
Reverse Leakage Current (Rated V _R , T _A = 100°C, 300 µsec pulse minimum)		I _{R2}	2	10	mA
Junction Capacitance (V _R = 10V, f = 1MHz, T _A = 25°C)		C _J	480	600	pF

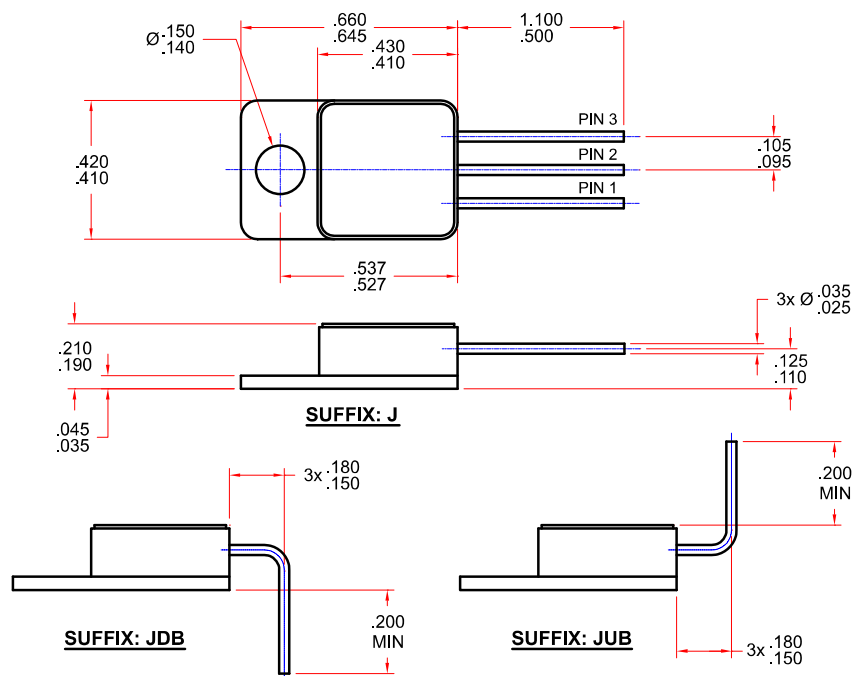
Package Outline: TO-257

PIN OUT:

PIN 1: CATHODE

PIN 2: ANODE

PIN 3: ANODE



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