



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
 Phone: (562) 404-4474 * Fax: (562) 404-1773
 ssdi@ssdi-power.com * www.ssdi-power.com

1N6660

**40 AMP, 45 VOLTS
 CENTERTAP
 SCHOTTKY RECTIFIER**

Designer's Data Sheet

Part Number/Ordering Information ^{1/}

1N6660

^{2/} **Screening** = Not Screened
 TX = TX Level
 TXV = TXV Level
 S = S Level

Configuration = Common Cathode
 R = Common Anode
 D = Doubler
 DR = Doubler Reverse

- FEATURES:**
- **Low Forward Voltage Drop**
 - **Low Reverse Leakage Current**
 - **Guard Ring for Over-voltage Protection**
 - **Isolated Hermetically Sealed Power Package**
 - **Ceramic Seals Available**
 - **Custom Lead Forming Available**
 - **Eutectic Die Attach**
 - **175°C Operating Temperature**
 - **Common Anode and Doubler Versions Available**
 - **TX, TXV, or Space Level Screening Available**
 - **Compatible with MIL-PRF-19500/608**

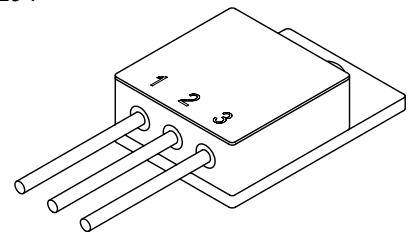
MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage and DC Blocking Voltage <div style="float: right;">1N6660</div>	V_{RRM} V_{RWM} V_R	45	Volts
Average Rectified Output Current ^{4/ 5/} (Resistive Load, 60Hz, Sine Wave, TA=25°C)	I_O	40	Amps
Peak Surge Current ^{4/ 5/} (8.3 ms Pulse, Half Sine Wave Superimposed on Io, Allow Junction to Reach Equilibrium Between Pulses, TA=25°C)	I_{FSM}	600	Amps
Peak Reverse Energy (per #4.3.3 of MIL-PRF-19500/608)	E_r	0.5	mJ
Operating and Storage Temperature	T_{OP} & T_{STG}	-65 to +175	°C
Maximum Thermal Resistance Junction to Case ^{3/}	$R_{\theta JC}$	1.8	°C/W

NOTES:

- ^{1/} For ordering Information, Price, and Availability, Contact Factory.
- ^{2/} Screening per MIL-PRF-19500
- ^{3/} Per Leg
- ^{4/} Per Leg Both Legs Tied Together
- ^{5/} Doublers (per leg): $I_O = 20$ A, $I_{FSM} = 300$ A

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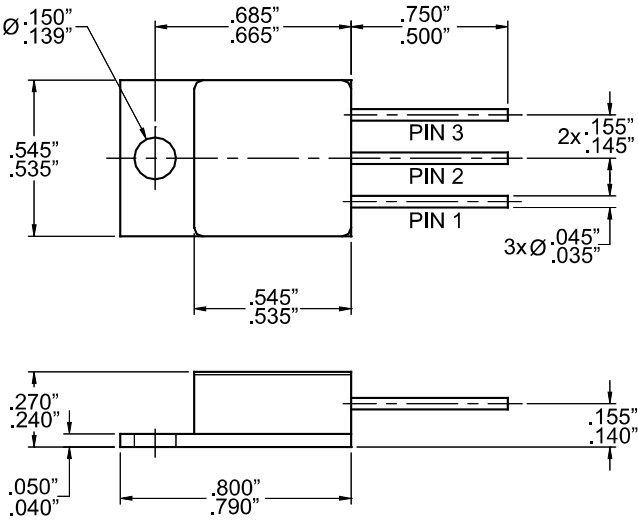
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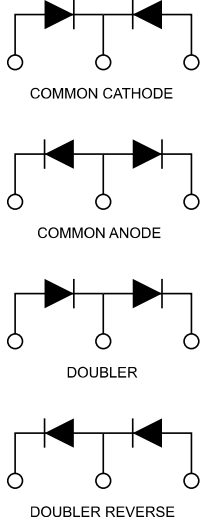
ELECTRICAL CHARACTERISTICS (Per Leg)

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 5 \text{ A dc}, T_A = 25^\circ \text{ C}, \text{ Pulse}$) ($I_F = 15 \text{ A dc}, T_A = 25^\circ \text{ C}, \text{ Pulse}$) ($I_F = 30 \text{ A dc}, T_A = 25^\circ \text{ C}, \text{ Pulse}$)	V_{F1} V_{F2} V_{F3}	0.55 0.75 1.0	Vdc
Instantaneous Forward Voltage Drop ($I_F = 15 \text{ A dc}, T_A = -55^\circ \text{ C}, \text{ Pulse}$)	V_{F4}	0.80	Vdc
Reverse Leakage Current (Rated $V_R, T_A = 25^\circ \text{ C}, \text{ Pulse}$)	I_{R1}	1	mA
Reverse Leakage Current (Rated $V_R, T_A = 125^\circ \text{ C}, \text{ Pulse}$)	I_{R2}	40	mA
Junction Capacitance ($V_R = 5 \text{ Vdc}, T_A = 25^\circ \text{ C}, f = 1 \text{ MHz}$)	C_J	2000	pF

TO-254 :



Configurations:



Pin Assignment:

For information on curves, contact the Factory Representative for Engineering Assistance.

Code	Function	Pin 1	Pin 2	Pin 3
	Common Cathode	Anode	Cathode	Anode
R	Common Anode	Cathode	Anode	Cathode
D	Doubler *	Cathode	AC	Anode
DR	Doubler, Reverse *	Anode	AC	Cathode

* Contact Factory for Doubler Specifications