



Solid State Devices, Inc.

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Designer's Data Sheet

Part Number/Ordering Information ^{1/}

1N6660

L Screening ^{2/}

— = Not Screened
 TX = TX Level
 TXV = TXV Level
 S = S Level

Configuration

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

1N6660

40 AMP, 45 VOLTS CENTERTAP SCHOTTKY RECTIFIER

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 1N6660	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 I_O , 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.

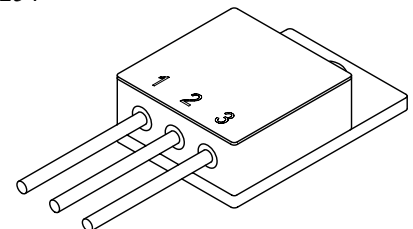
^{2/} Screening per MIL-PRF-19500

^{3/} Per Leg

^{4/} Per Leg Both Legs Tied Together

^{5/} Doublers (per leg): $I_O = 20$ A, $I_{FSM} = 300$ A

TO-254



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

DATA SHEET #: RS0029D

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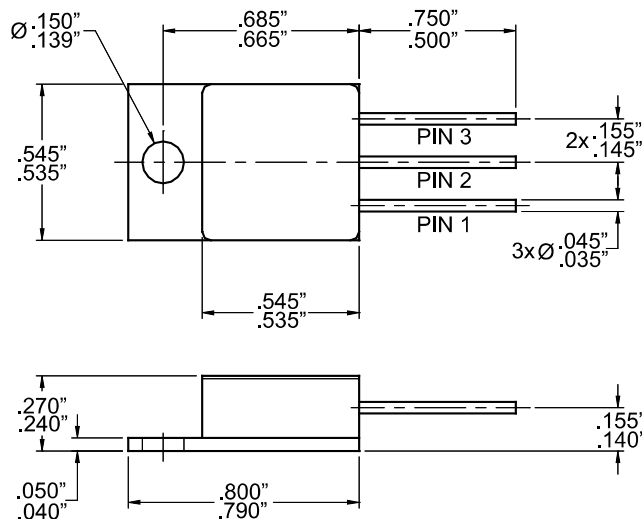
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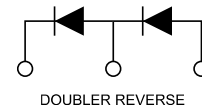
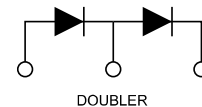
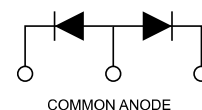
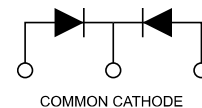
ELECTRICAL CHARACTERISTICS (Per Leg)

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

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