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

SSR7510M
SSR7515Z

Designer's Data Sheet

Part Number / Ordering Information[1/]

SSR 75 10 __ __ __

- **Screening[2/]**
  - __ = Not Screened
  - TX = TX Level
  - TXV = TXV Level
  - S = S Level
- **Lead Bend Option**
  - __ = Straight Leads
  - DB = Down Bend
  - UB = Up Bend
- **Package**
  - M = TO-254
  - Z = TO-254Z
- **Voltage**
  - 10 = 100 V
  - 15 = 150 V
- **Current**
  - 75 = 75 A

75 AMP
LOW LEAKAGE
SCHOTTKY RECTIFIER
100 - 150 VOLTS

FEATURES:

- Low Forward Voltage Drop
- Very Low Reverse Leakage
- Hermetically Sealed Custom Surface Mount Package
- Guard Ring for Overvoltage Protection
- 175°C Operating Junction Temperature
- Available with Glass or Ceramic Seals – Consult Factory for Details
- TX, TXV, and S Level Screening Available - Consult Factory

MAXIMUM RATINGS[3/]		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	**SSR7510** **SSR7515**	V_{RRM} V_{RWM} V_R	100 150	**Volts**
Average Rectified Forward Current (Resistive load, 60 Hz, sine wave, T_A = 25°C)[4/]		I_O	75	**Amps**
Peak Surge Current (8.3 ms pulse, half sine wave, T_A = 25°C)		I_{FSM}	500	**Amps**
Operating & Storage Temperature		T_{OP} & T_{STG}	-55 to +175	**°C**
Maximum Thermal Resistance (Junction to case)[4/]		$R_{\theta JC}$	0.75	**°C/W**

NOTES:

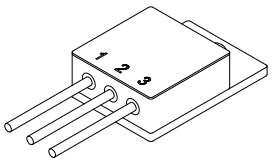
1/ For ordering information, price, and availability - contact factory.

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

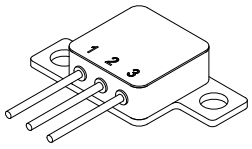
3/ Unless otherwise specified, all electrical characteristics @25ºC.

4/ Both anode legs together.

TO-254 (M)



TO-254Z (Z)



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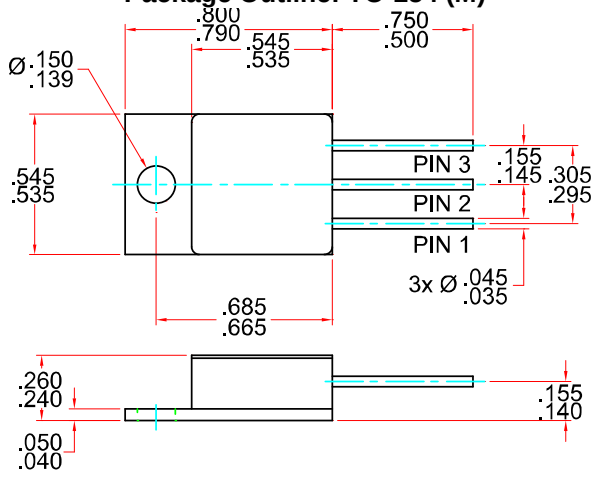
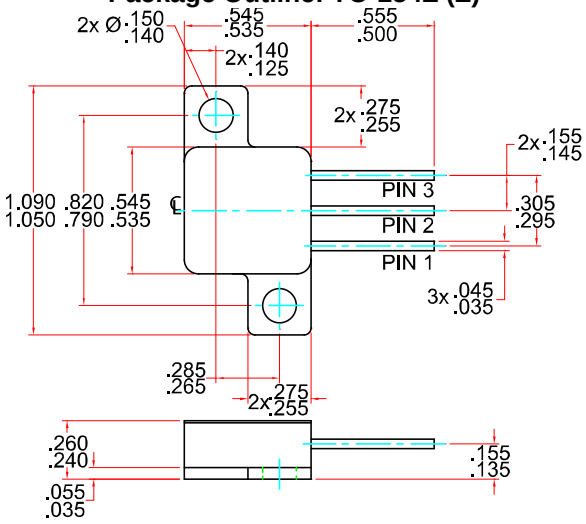
SSR7510M
SSR7515Z

ELECTRICAL CHARACTERISTICS		Symbol	Typical	Maximum	Unit
Instantaneous Forward Voltage Drop (I_F = 5 A_{DC}, 300 - 500 µsec pulse)	T_A = -55°C T_A = 25°C T_A = 125°C	V_{F1} V_{F2} V_{F3}	0.66 0.56 0.42	- 0.61 0.47	V_{DC}
Instantaneous Forward Voltage Drop (I_F = 20 A_{DC}, 300 - 500 µsec pulse)	T_A = -55°C T_A = 25°C T_A = 125°C	V_{F4} V_{F5} V_{F6}	0.81 0.73 0.58	- 0.80 0.65	V_{DC}
Instantaneous Forward Voltage Drop (I_F = 40 A_{DC}, 300 - 500 µsec pulse)	T_A = -55°C T_A = 25°C T_A = 125°C	V_{F7} V_{F8} V_{F9}	0.95 0.85 0.70	- 0.92 0.77	V_{DC}
Instantaneous Forward Voltage Drop (I_F = 75 A_{DC}, 300 - 500 µsec pulse)	T_A = -55°C T_A = 25°C T_A = 125°C	V_{F10} V_{F11} V_{F12}	1.1 0.99 0.85	- 1.1 0.93	V_{DC}
Reverse Leakage Current (T_A = 25°C, 300 µsec pulse minimum)	V_R = 100 V V_R = 150 V	I_{R1}	0.8 20	20 200	µA
Reverse Leakage Current (T_A = +125°C, 300 µsec pulse minimum)	V_R = 100 V V_R = 150 V	I_{R2}	0.6 2.0	3 10	mA
Reverse Leakage Current (T_A = +150°C, 300 µsec pulse minimum)	V_R = 100 V V_R = 150 V	I_{R3}	3 10	-	mA
Junction Capacitance (f = 1MHz, T_A = 25°C)	V_R = 5 V V_R = 10 V	C_J	1850 1350	- 1700	pF

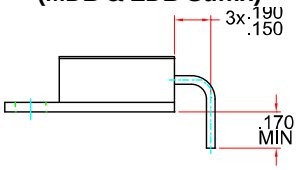
Package Outline: TO-254 (M)



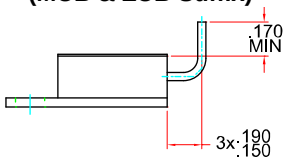
Package Outline: TO-254Z (Z)



Lead Bend Option: Down Bend
(MDB & ZDB Suffix)



Lead Bend Option: Up Bend
(MUB & ZUB Suffix)



PIN OUT:
PIN 1: CATHODE
PIN 2: ANODE
PIN 3: ANODE

NOTE: All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.	**DATA SHEET #: SH0062C**	**DOC**