



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

DESIGNER'S DATA SHEET

Part Number / Ordering Information^{1/}

SSR30 10 — —
SSR30 15 — —

Screening^{2/}

— = Not Screened

TX = TX Level

TXV = TXV Level

S = S Level

Package:

S.5 = SMD.5

G = Cerpack

Voltage:

10 = 100 Volts

15 = 150 Volts

SSR3010S.5 – SSR3015S.5 and SSR3010G – SSR3015G

30 AMP SCHOTTKY RECTIFIER 100 - 150 Volts

Features:

- Low Forward Voltage Drop
- Very Low Reverse Leakage
- Excellent High Temperature Performance
- Hermetically Sealed, Low Thermal Resistance Power Package
- Replacement for 1N7038U3 and 1N6844U3
- TX, TXV, and S-Level Screening Available

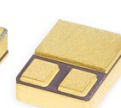
Maximum Ratings	Symbol	Value	Unit
Peak Repetitive Reverse Voltage and DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100 150	V
Average Rectified Forward Current	I_O	30	A
Peak Surge Current (8.3 ms pulse, half sinewave superimposed on I_O ; allow junction to reach equilibrium in between pulses; $T_A = 25^\circ\text{C}$)	I_{FSM}	175	A
Operating & Storage Temperature	T_{OP} & T_{STG}	-65 to +175	$^\circ\text{C}$
Maximum Thermal Resistance (Junction to Case)	$R_{\theta JC}$	1.25	$^\circ\text{C/W}$

NOTES: *Pulsed per MIL-STD-750.

^{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.



*Dime used for size reference

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

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SSR3010S.5 – SSR3015S.5 and SSR3010G – SSR3015G

Electrical Characteristics ^{3/}		Symbol	Typ	Max	Unit
Instantaneous Forward Voltage Drop (I _F = 1 A _{DC} , Pulsed)	T _A = -55°C	V _{F1}	0.65	-	V _{DC}
	T _A = 25°C	V _{F2}	0.56	-	
	T _A = 125°C	V _{F3}	0.41	-	
Instantaneous Forward Voltage Drop (I _F = 5 A _{DC} , Pulsed)	T _A = -55°C	V _{F4}	0.76	-	V _{DC}
	T _A = 25°C	V _{F5}	0.68	-	
	T _A = 125°C	V _{F6}	0.53	-	
Instantaneous Forward Voltage Drop (I _F = 10 A _{DC} , Pulsed)	T _A = -55°C	V _{F7}	0.85	-	V _{DC}
	T _A = 25°C	V _{F8}	0.75	-	
	T _A = 125°C	V _{F9}	0.60	-	
Instantaneous Forward Voltage Drop (I _F = 15 A _{DC} , Pulsed)	T _A = -55°C	V _{F10}	0.90	-	V _{DC}
	T _A = 25°C	V _{F11}	0.79	0.85	
	T _A = 125°C	V _{F12}	0.64	0.70	
Instantaneous Forward Voltage Drop (I _F = 20 A _{DC} , Pulsed)	T _A = -55°C	V _{F13}	0.91	-	V _{DC}
	T _A = 25°C	V _{F14}	0.79	0.87	
	T _A = 125°C	V _{F15}	0.65	0.73	
Instantaneous Forward Voltage Drop (I _F = 30 A _{DC} , Pulsed)	T _A = -55°C	V _{F16}	0.98	-	V _{DC}
	T _A = 25°C	V _{F17}	0.86	0.95	
	T _A = 125°C	V _{F18}	0.71	0.83	
Reverse Leakage Current (T _A = 25°C, Pulsed)	V _R = 100 V	I _{R1}	0.2	5	μA
	V _R = 150 V	I _{R2}	5.0	50	
Reverse Leakage Current (T _A = +125°C, Pulsed)	V _R = 100 V	I _{R3}	150	750	μA
	V _R = 150 V	I _{R4}	500	2500	
Reverse Leakage Current (T _A = +150°C, Pulsed)	V _R = 100 V	I _{R5}	0.75	-	mA
	V _R = 150 V	I _{R6}	2.50	-	
Junction Capacitance (f = 1 MHz, T _A = 25°C)	V _R = 5 V	C _{J1}	460	-	pF
	V _R = 10 V	C _{J2}	335	400	

NOTES: *Pulsed per MIL-STD-750.

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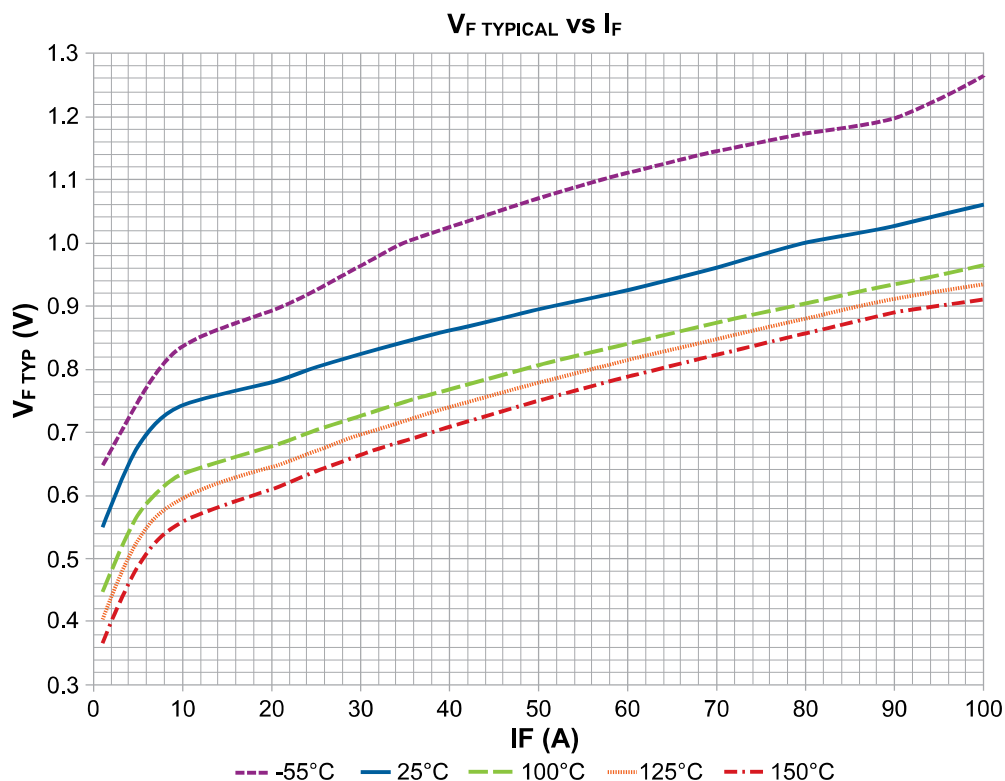
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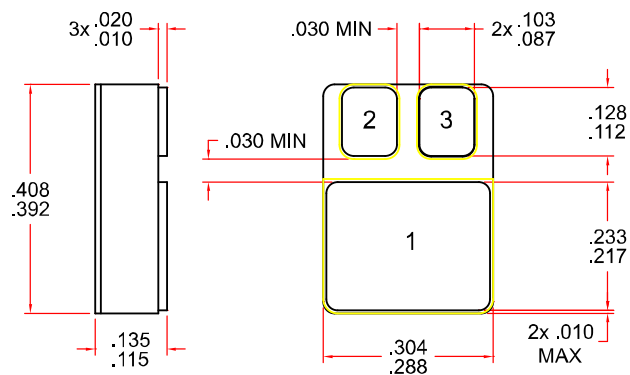
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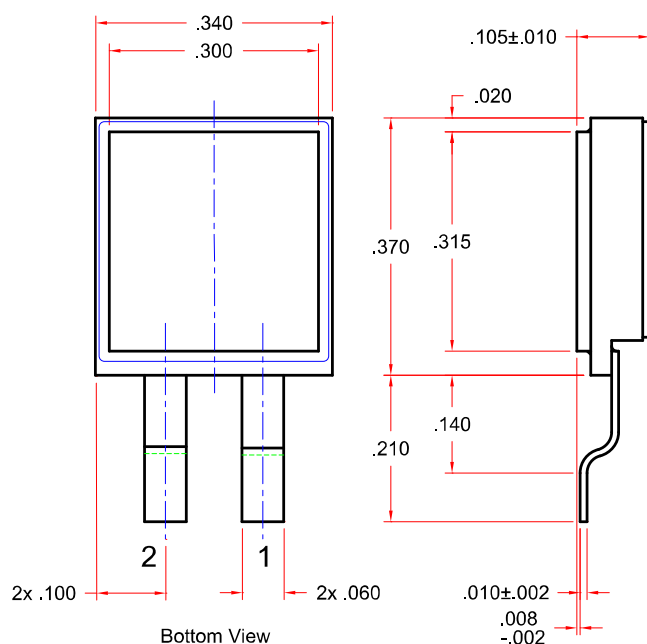
Package Outline: SMD.5



Pin Assignment

Package	Cathode	Anode	Anode
SMD.5 (S.5)	Pin 1	Pin 2	Pin 3
Cerpack (G)	Bottom Pad	Pin 1	Pin 2

Package Outline: Cerpack (G)



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