



Solid State Devices, Inc.

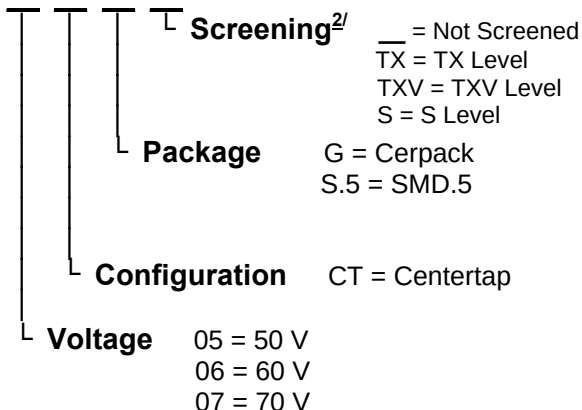
14701 Firestone Blvd * La Mirada, CA 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

SSR1505CTG thru SSR1507CTG and SSR1505CTS.5 thru SSR1507CTS.5

Designer's Data Sheet

Part Number / Ordering Information^{1/}

SSR15



15 AMP CENTERTAP SCHOTTKY RECTIFIER 50 - 70 VOLTS

FEATURES:

- Extremely low forward voltage drop
- Low reverse leakage
- Hermetically sealed custom surface mount package
- Guard ring for overvoltage protection
- Eutectic die attach
- 175°C operating junction temperature
- TX, TXV, and S level screening available - consult factory

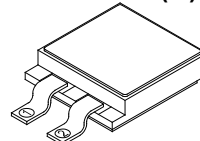
MAXIMUM RATINGS^{3/}

		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	SSR1505CT SSR1506CT SSR1507CT	V_{RRM} V_{RWM} V_R	50 60 70	Volts
Average Rectified Forward Current (Resistive load, 60 Hz, sine wave, $T_A = 25^\circ\text{C}$) ^{4/}		I_O	15	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}	100	Amps
Operating & Storage Temperature		$T_{OP} \& T_{stg}$	-65 to +175	°C
Maximum Thermal Resistance (Junction to Case) ^{4/}	Cerpack SMD.5	$R_{\theta JC}$	1.6 1.6	°C/W

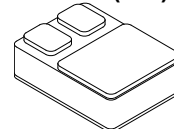
NOTES:

- 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.
- 4/ Both legs together.

CERPACK (G)



SMD.5 (S.5)



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

DATA SHEET #: SH0058A

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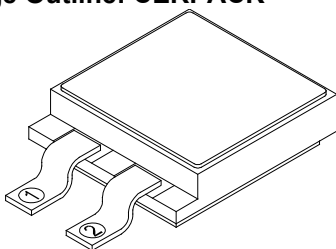
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**SSR1505CTG thru SSR1507CTG
and
SSR1505CTS.5 thru SSR1507CTS.5**

ELECTRICAL CHARACTERISTICS (per leg) ^{3/}		Symbol	Min	Typ	Max	Units
Instantaneous Forward Voltage Drop (T _A =25°C, 300μsec pulse)	I _F = 1 A	V _{F1}	—	0.38	0.43	V _{DC}
	I _F = 5 A	V _{F2}	—	0.51	0.58	
	I _F = 10 A	V _{F3}	—	0.62	0.70	
Instantaneous Forward Voltage Drop (T _A =-55°C, 300μsec pulse)	I _F = 1 A	V _{F4}	—	0.46	0.50	V _{DC}
	I _F = 5 A	V _{F5}	—	0.54	0.62	
	I _F = 10 A	V _{F6}	—	0.61	—	
Instantaneous Forward Voltage Drop (T _A =125°C, 300μsec pulse)	I _F = 1 A	V _{F7}	—	0.26	0.35	V _{DC}
	I _F = 5 A	V _{F8}	—	0.45	0.53	
	I _F = 10 A	V _{F9}	—	0.53	—	
Reverse Leakage Current (Rated V _R , T _A = 25°C, 300μsec pulse minimum)		I _{R1}	—	25	100	μA
Reverse Leakage Current (Rated V _R , T _A = 100°C, 300μsec pulse minimum)		I _{R2}	—	4	—	mA
Reverse Leakage Current (Rated V _R , T _A = 125°C, 300μsec pulse minimum)		I _{R3}	—	15	25	mA
Junction Capacitance (V _R = 10V, f = 1MHz, T _A = 25°C)		C _J	—	—	300	pF

Package Outline: CERPACK



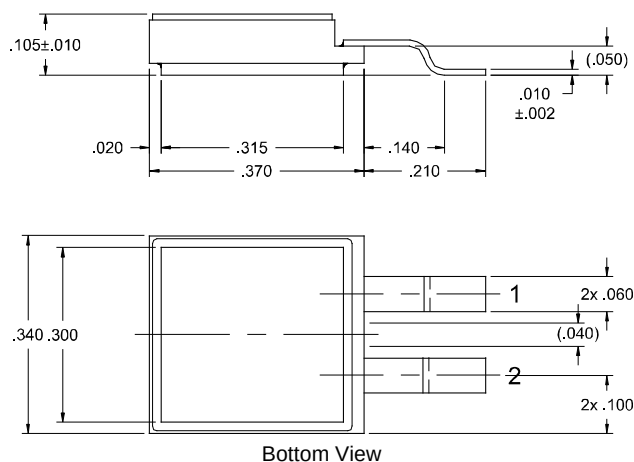
PIN OUT:

PIN 1: ANODE 1

PIN 2: ANODE 2

TAB: CATHODE

Note: For optimal performance, connect anode terminals together.



Package Outline: SMD.5

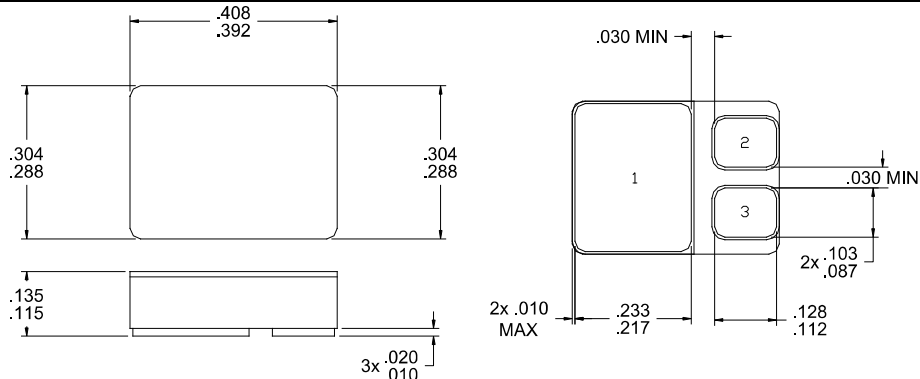
PIN OUT:

PIN 1: ANODE 1

PIN 2: ANODE 2

TAB: CATHODE

Note: For optimal performance, connect anode terminals together.



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