



Solid State Devices, Inc.

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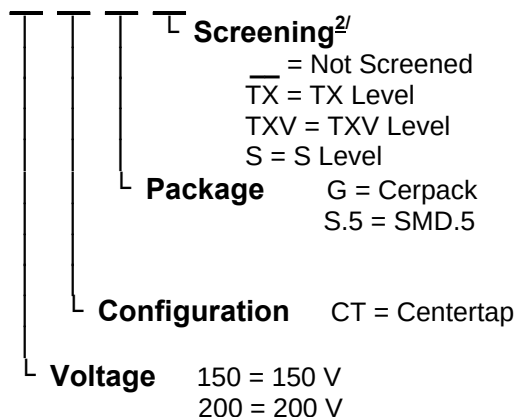


**SSR20150CTG thru SSR20200CTG
and
SSR20150CTS.5 thru SSR20200CTS.5**

Designer's Data Sheet

Part Number / Ordering Information^{1/}

SSR20



**20 AMP
HERMETIC SURFACE MOUNT
CENTERTAP SCHOTTKY RECTIFIER
150 - 200 VOLTS**

FEATURES:

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

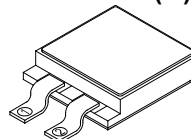
MAXIMUM RATINGS^{3/}

		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	SSR20150CT SSR20200CT	V_{RRM} V_{RWM} V_R	150 200	Volts
Average Rectified Forward Current (Resistive load, 60 Hz, sine wave, $T_A = 25^\circ\text{C}$, per leg)		I_O	10	Amps
Peak Surge Current (8.3 ms pulse, half sine wave superimposed on I_O , allow junction to reach equilibrium between pulses, $T_A = 25^\circ\text{C}$; per leg)		I_{FSM}	100	Amps
Operating & Storage Temperature		T_{OP} & T_{stg}	-65 to +175	$^\circ\text{C}$
Maximum Thermal Resistance (Junction to Case, per leg)	Cerpack SMD.5	$R_{\theta JC}$	2	$^\circ\text{C/W}$

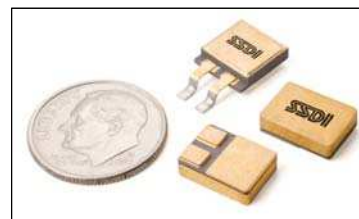
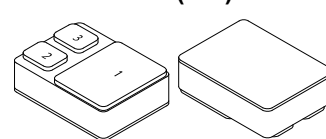
NOTES:

- ^{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.

CERPACK (G)



SMD.5 (S.5)



(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.

DATA SHEET #: SH0071A

DOC



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and
SSR20150CTS.5 thru SSR20200CTS.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}	-	0.64	0.7	V _{DC}
	I _F = 3 A	V _{F2}		0.75	-	
	I _F = 5 A	V _{F3}		0.81	0.9	
	I _F = 10 A	V _{F4}		0.91	1.0	
Instantaneous Forward Voltage Drop (T _A =-55°C, 300μsec pulse)	I _F = 1 A	V _{F5}	-	0.68	0.75	V _{DC}
	I _F = 3 A	V _{F6}		0.84	-	
	I _F = 5 A	V _{F7}		0.91	1.0	
	I _F = 10 A	V _{F8}		1.05	1.15	
Instantaneous Forward Voltage Drop (T _A =125°C, 300μsec pulse)	I _F = 1 A	V _{F9}	-	0.48	0.55	V _{DC}
	I _F = 3 A	V _{F10}		0.59	-	
	I _F = 5 A	V _{F11}		0.65	0.75	
	I _F = 10 A	V _{F12}		0.76	0.86	
Reverse Leakage Current (Rated V _R , T _A = 25°C, 300μsec pulse minimum)		I _{R1}	-	0.4	10	μA
Reverse Leakage Current (Rated V _R , T _A = 100°C, 300μsec pulse minimum)		I _{R2}	-	0.5	-	mA
Reverse Leakage Current (Rated V _R , T _A = 125°C, 300μsec pulse minimum)		I _{R3}	-	0.8	5	mA
Junction Capacitance (f = 1MHz, T _A = 25°C)	V _R = 5V	C _J	-	185	-	pF
	V _R = 10V			135	175	

**Package Outline:
CERPACK**

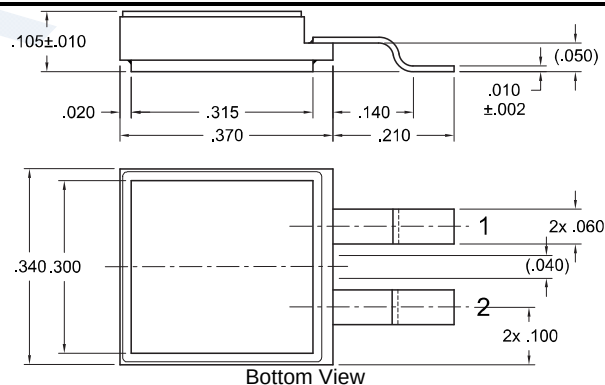
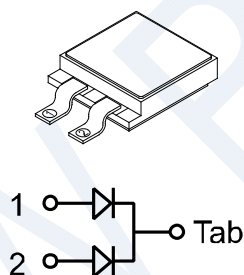
PIN OUT:

PIN 1: ANODE 1

PIN 2: ANODE 2

TAB: CATHODE

Note: For optimal performance, connect anode terminals together.



**Package Outline:
SMD.5**

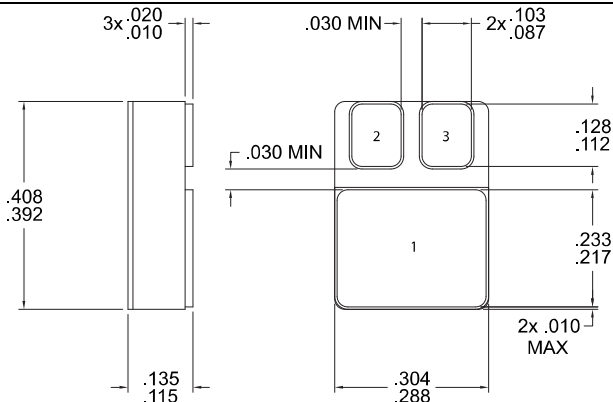
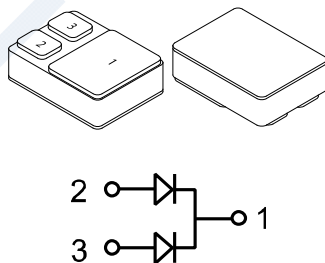
PIN OUT:

PIN 1: CATHODE

PIN 2: ANODE 1

PIN 3: ANODE 2

Note: For optimal performance, connect anode terminals together.



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