Solid State Devices, Inc.
14701 Firestone Blvd * La Mirada, CA 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
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NEW PRODUCT

SSR04150S.22 thru SSR04200S.22 and SSR04150-4 thru SSR04200-4

Designer's Data Sheet

Part Number / Ordering Information[1/]

SSR04 ___ ___ ___

- **Screening**[2/]: __ = Not Screened, TX = TX Level, TXV = TXV Level, S = S Level
- **Package**: S.22 = SMD.22, -4 = LCC4
- **Voltage**: 150 = 150 V, 200 = 200 V

4 AMP HERMETIC SURFACE MOUNT 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
- 175ºC operating junction temperature
- TX, TXV, and S level screening available - consult factory

MAXIMUM RATINGS[3/ 4/]		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	**SSR04150** **SSR04200**	V_{RRM} V_{RWM} V_R	150 200	**Volts**
Average Rectified Forward Current (Resistive load, 60 Hz, sine wave, T_A = 25ºC)		I_O	4	**Amps**
Peak Surge Current (8.3 ms pulse, half sine wave superimposed on I_O, allow junction to reach equilibrium between pulses, T_A = 25ºC)		I_{FSM}	50	**Amps**
Operating & Storage Temperature		T_{OP} & T_{stg}	-65 to +175	**ºC**
Maximum Thermal Resistance (Junction to Case)		$R_{\theta JC}$	8 (typ 6.5)	**ºC/W**

NOTES:

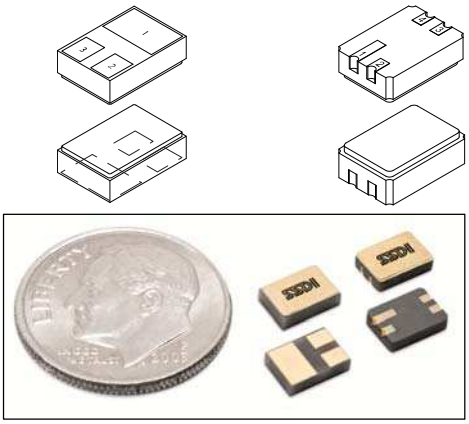
1/ For ordering information, price, and availability - contact factory.

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

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

4/ SMD.22: For optimal performance, connect anode terminals together. LCC4: For optimal performance, connect anode terminals together and cathode terminals together.

SMD.22 (S.22) **LCC4 (-4)**



(dime used for size reference)

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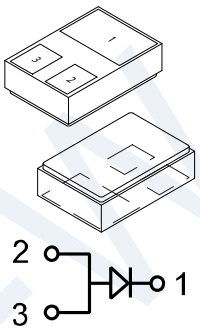
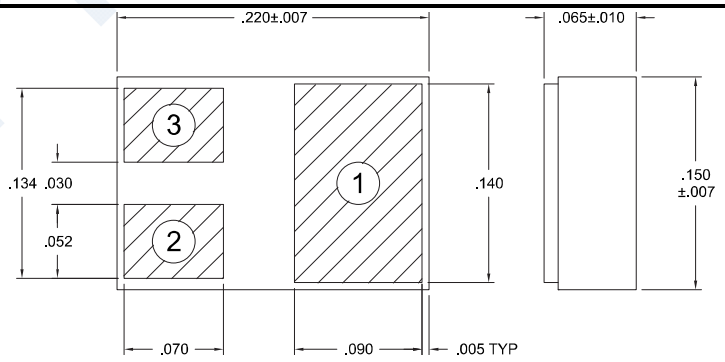
SSR04150S.22 thru SSR04200S.22 and SSR04150-4 thru SSR04200-4

ELECTRICAL CHARACTERISTICS [4/]		Symbol	Min	Typ	Max	Units
Instantaneous Forward Voltage Drop (T_A=25ºC, 300µsec pulse)	I_F = 0.1 A	V_{F1}	-	0.57	-	V_{DC}
	I_F = 0.5 A	V_{F2}		0.72	0.80	
	I_F = 1 A	V_{F3}		0.77	0.85	
	I_F = 2 A	V_{F4}		0.84	-	
	I_F = 4 A	V_{F5}		0.92	1.00	
Instantaneous Forward Voltage Drop (T_A=-55ºC, 300µsec pulse)	I_F = 1 A	V_{F6}	-	0.92	-	V_{DC}
	I_F = 2 A	V_{F7}		1.11	-	
	I_F = 4 A	V_{F8}		1.45		
Instantaneous Forward Voltage Drop (T_A=125ºC, 300µsec pulse)	I_F = 0.1 A	V_{F11}	-	0.43	-	V_{DC}
	I_F = 0.5 A	V_{F12}		0.56	0.65	
	I_F = 1 A	V_{F13}		0.62	0.71	
	I_F = 2 A	V_{F14}		0.70	-	
	I_F = 4 A	V_{F15}		0.79	0.88	
Reverse Leakage Current (Rated V_R, T_A = 25ºC, 300µsec pulse minimum)		I_{R1}	-	0.15	2	µA
Reverse Leakage Current (Rated V_R, T_A = 100ºC, 300µsec pulse minimum)		I_{R2}	-	30	-	µA
Reverse Leakage Current (Rated V_R, T_A = 125ºC, 300µsec pulse minimum)		I_{R3}	-	150	200	µA
Reverse Leakage Current (Rated V_R, T_A = 150ºC, 300µsec pulse minimum)		I_{R4}	-	600	-	µA
Junction Capacitance (f = 1MHz, T_A = 25ºC)	V_R = 5V	C_J	-	21	-	pF
	V_R = 10V			16	25	

Package Outline: SMD.22 (S.22)

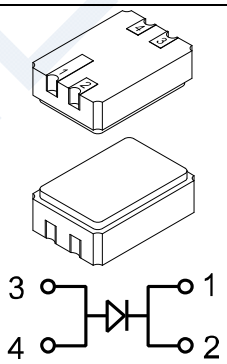
PIN OUT:
PIN 1: CATHODE
PIN 2: ANODE
PIN 3: ANODE
Note: For optimal performance, connect anode terminals together.

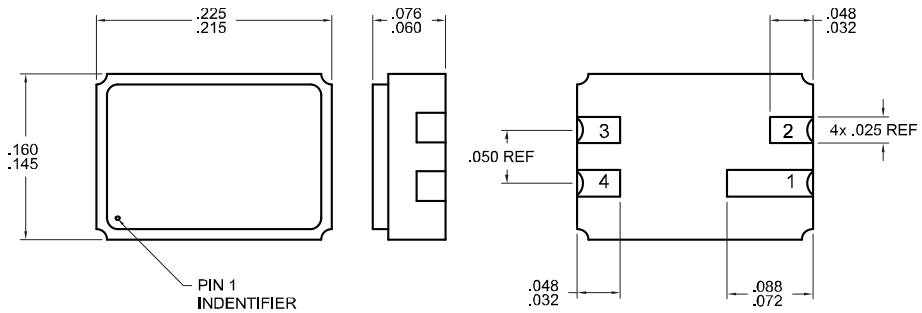




Package Outline: LCC4 (-4)

PIN OUT:
PIN 1: CATHODE
PIN 2: CATHODE
PIN 3: ANODE
PIN 4: ANODE
Note: For optimal performance, connect anode terminals together and cathode terminals together.





NOTE: All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.	DATA SHEET #: SH0073A	DOC