



Solid State Devices, Inc.

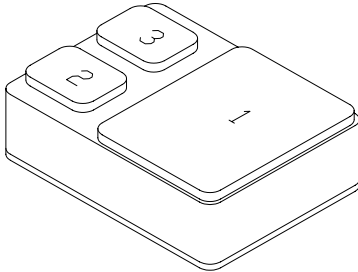
14830 Valley View Blvd * La Mirada, Ca 90638

Phone: (562) 404-7855 * Fax: (562) 404-1773

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DESIGNER'S DATA SHEET

SMD.5



SSR1510

Screening $\frac{2}{\text{L}}$ = Commercial
TX = TX Level
TXV = TXV Level
S = S Level
Package: S.5 = SMD.5

SSR1510S.5

**15 AMP /100 Volts
LOW VOLTAGE DROP
SCHOTTKY POWER DIODE**

Features:

- Extremely Low Forward Voltage Drop
- Low reverse leakage
- Excellent high temperature performance
- Hermetically Sealed, low thermal resistance power Package
- Eutectic die attach and monometallic contacts for improved reliability
- Replacement for 15LJQ100 types
- TX, TXV, S-Level screening available

Maximum Ratings	Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	V
Average Rectified Forward Current	I_O	15	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}	250	A
Operating & Storage Temperature	T_{OP} & T_{STG}	-55 to +150	$^\circ\text{C}$
Maximum Thermal Resistance (Junction to Case)	$R_{\theta JC}$	2.25	$^\circ\text{C/W}$

PACKAGE OUTLINE:

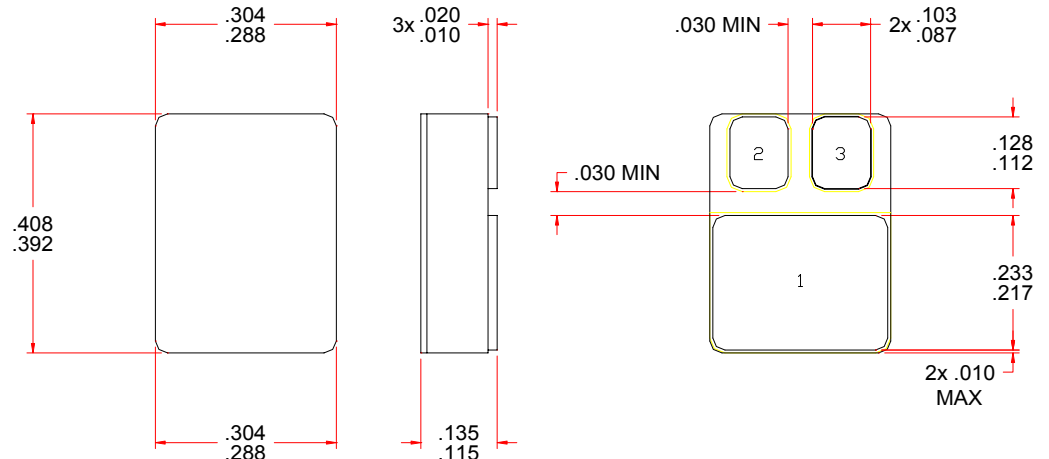
SMD.5

PINOUT:

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 #: SH0034A

DOC

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Electrical Characteristics ^{4/}		Symbol	Min	Typ	Max	Units
Instantaneous Forward Voltage Drop	$I_F = 1\text{ A}$	V_{F1}		460	—	
	$I_F = 5\text{ A}$	V_{F2}	—	600	635	mV
	$I_F = 10\text{ A}$	V_{F3}		710	—	
	$I_F = 15\text{ A}$	V_{F4}		850	890	
Instantaneous Forward Voltage Drop, $T_c = 125^\circ\text{C}$	$I_F = 5\text{ A}$	V_{F5}	—	500	520	mV
	$I_F = 15\text{ A}$	V_{F6}		675	700	
Instantaneous Forward Voltage Drop, $T_c = -55^\circ\text{C}$	$I_F = 5\text{ A}$	V_{F7}	—	625	—	mV
	$I_F = 15\text{ A}$	V_{F8}		825	—	
Reverse Leakage Current	$V_R = 100\text{V}$	I_{R1}	—	15	500	μA
Reverse Leakage Current, $T_c = 75^\circ\text{C}$	$V_R = 100\text{V}$	I_{R2}	—	500	—	μA
Reverse Leakage Current, $T_c = 125^\circ\text{C}$	$V_R = 100\text{V}$	I_{R3}	—	8	15	mA
Junction Capacitance	$V_R = 5\text{V}, f = 1\text{ MHz}$	C_{j1}	—	380	500	pF
	$V_R = 10\text{V}, f = 1\text{ MHz}$	C_{j2}	—	425	—	

NOTES:* Pulse Test: Pulse Width = 300 μsec , Duty Cycle = 2%.^{4/} Unless Otherwise Specified, All Electrical Characteristics @25°C.

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