



Solid State Devices, Inc.



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SSR0340

3 AMP SCHOTTKY SMD Rectifier 40 VOLTS

Designer's Data Sheet

Part Number / Ordering Information ^{1/}


SSR 03 40  

Current
03 = 3A

Voltage
40 = 40V

Package
S.22 = SMD.22
/5 = TO-5

Screening ^{2/}

-  = Not Screened
- TX = TX Level
- TXV = TXV Level
- S = S Level

- FEATURES:**
- Low Forward Voltage Drop: 0.48V
 - Hermetically Sealed Surface Mount Package
 - Guard Ring for Overvoltage Protection
 - 3 Amp Replacement for 1N5817, 1N5818, and 1N5819
 - Higher Voltages Available – Contact Factory
 - TX, TXV, and Space Level Screening Available - Contact Factory.

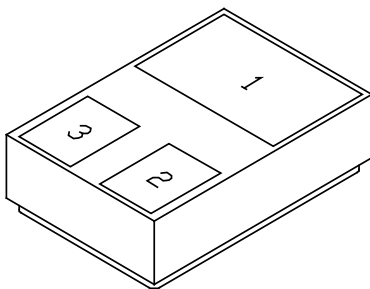
MAXIMUM RATINGS	Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	Volts
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave, $T_A = 100^\circ\text{C}$)	I_O	3	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, Superimposed on I_O , Allow Junction to Reach Equilibrium between Pulses, $T_A = 25^\circ\text{C}$)	I_{FSM}	60	Amps
Operating and Storage Temperature	T_{OP} & T_{stg}	-55 to +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	15	$^\circ\text{C/W}$

Notes:

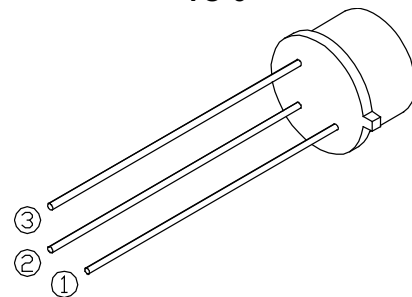
^{1/} For ordering information, price, operating curves and availability - contact factory.

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

SMD.22



TO-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 #: SH0051A

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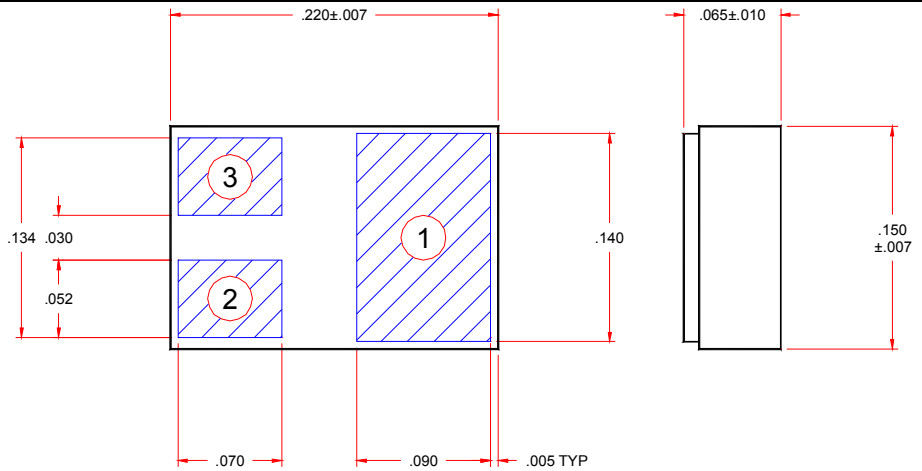
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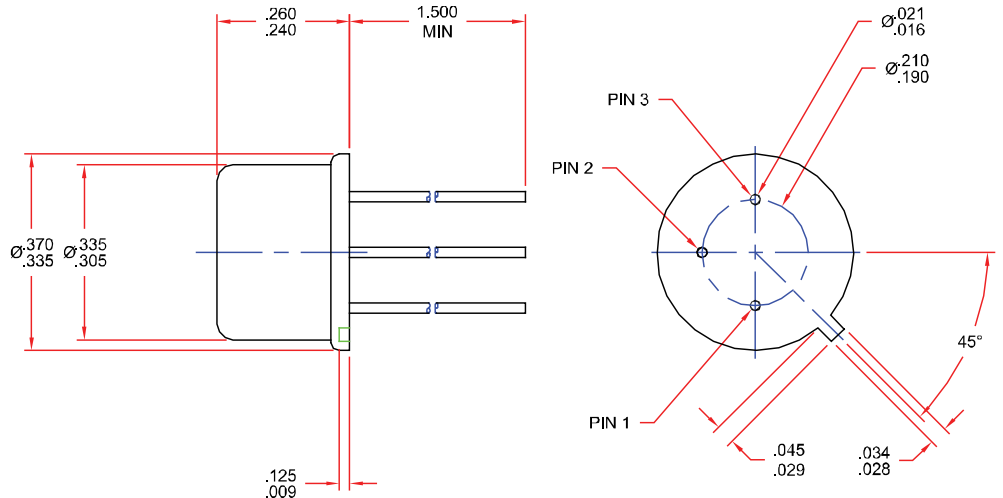
SSR0340

ELECTRICAL CHARACTERISTICS		Symbol	Value	Unit
Instantaneous Forward Voltage Drop ($T_A = 25^\circ\text{C}$, 300 μsec Pulse)	$I_F = 1 A_{DC}$	V_{F1}	0.48	V_{DC}
	$I_F = 2 A_{DC}$	V_{F2}	0.58	
	$I_F = 3 A_{DC}$	V_{F3}	0.71	
Instantaneous Forward Voltage Drop ($T_A = -55^\circ\text{C}$, 300 μsec Pulse)	$I_F = 1 A_{DC}$	V_{F4}	0.56	V_{DC}
	$I_F = 2 A_{DC}$	V_{F5}	0.64	
	$I_F = 3 A_{DC}$	V_{F6}	0.74	
Instantaneous Forward Voltage Drop ($T_A = +100^\circ\text{C}$, 300 μsec Pulse)	$I_F = 1 A_{DC}$	V_{F7}	0.40	V_{DC}
	$I_F = 2 A_{DC}$	V_{F8}	0.53	
	$I_F = 3 A_{DC}$	V_{F9}	0.66	
Reverse Leakage Current (Rated V_R , 300 μsec pulse minimum)	$T_A = 25^\circ\text{C}$	I_{R1}	0.1	mA
	$T_A = +100^\circ\text{C}$	I_{R2}	10	
Junction Capacitance ($V_R = 5V_{DC}$, $T_A = 25^\circ\text{C}$, $f = 1 \text{ MHz}$)		C_J	300	pF

CASE OUTLINE: SMD.22
 PIN 1: CATHODE
 PIN 2: ANODE
 PIN 3: ANODE



CASE OUTLINE: TO-5
 PIN 1: CATHODE
 PIN 2: ANODE
 PIN 3: ANODE



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