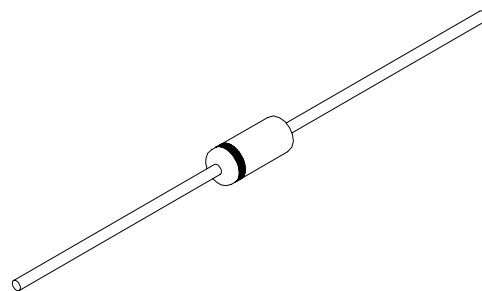




PRELIMINARY

SOLID STATE DEVICES, INC.14830 Valley View Blvd * La Mirada, Ca 90638
Phone: (562) 404-7855 * Fax: (562) 404-1773**Designer's Data Sheet****FEATURES:**

- Extremely Low Forward Voltage Drop
- High Surge Capability
- Hermetically Sealed
- Low Profile Surface Mount Package Available
- Hermetic Replacement for 1N5817 - 1N5819
- TX, TXV and Space Level Screening Available

**SPD5817
thru
SPD5819****1 AMP
20 - 40 VOLTS
SCHOTTKY
RECTIFIER****AXIAL**

Maximum Ratings		SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	SPD5817	V_{RRM}	20	Volts
	SPD5818	V_{RWM}	30	
	SPD5819	V_R	40	
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, $T_C = 25^\circ\text{C}$)		I_o	1	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}	50	Amps
Operating and Storage Temperature		$T_{OP} \ \& \ T_{STG}$	-55 TO +125	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Lead, $L = 3/8"$		$R_{\theta JL}$	70	$^\circ\text{C/W}$

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

DATA SHEET #: RS0113D

**SPD5817
thru
SPD5819**

PRELIMINARY

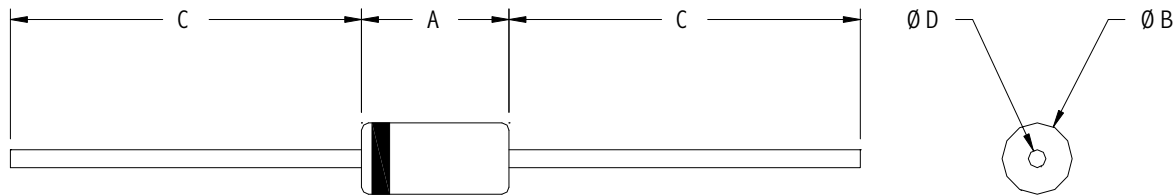


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Electrical Characteristics		SYMBOL	VALUE	UNITS
Instantaneous Forward Voltage Drop ($I_F = 1A_{DC}$, $T_A = 25^\circ C$, 300 - 500 μs Pulse)	SPD5817	V_{F1}	0.55	V_{DC}
	SPD5818		0.65	
	SPD5819		0.70	
Instantaneous Forward Voltage Drop ($I_F = 1A_{DC}$, $T_A = -55^\circ C$, 300 - 500 μs Pulse)	SPD5817	V_{F2}	0.57	V_{DC}
	SPD5818		0.67	
	SPD5819		0.72	
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ C$, 300 μs minimum Pulse)		I_{R1}	100	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ C$, 300 μs minimum Pulse)		I_{R2}	10.0	mA
Junction Capacitance ($V_R = 5V_{DC}$, $T_A = 25^\circ C$, $f = 1$ MHz)		C_J	70	pF

CASE OUTLINE:



NOTE:

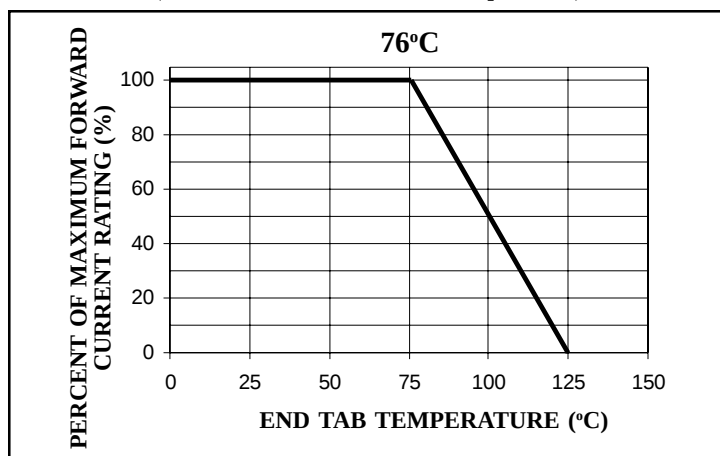
Lead Diameter is not controlled within 0.050" of the diode body.

DIMENSIONS

DIM	MIN.	MAX.
A	.160"	.205"
B	.080"	.107"
C	1.00"	-
D	.028"	0.032"

TYPICAL OPERATING CURVES

($T_A = 25^\circ C$ unless otherwise specified)



FORWARD VOLTAGE

