



Solid State Devices, Inc.

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Designer's Data Sheet

Part Number/Ordering Information ^{1/}

SPD5711

SPD5712

Screening ^{2/} = Not Screened

TX = TX Level

TXV = TXV Level

S = S Level

Junction Capacitance = 2.0 pF
A = 1.2 pF

Family/Rating SPD5711 = 50V, 33mA
SPD5712 = 16V, 75mA

SPD5711, SPD5711A

And

SPD5712, SPD5712A

33 - 75 mA

16 - 50 VOLTS

SCHOTTKY SMALL SIGNAL DIODE

Features:

- Extremely Low Turn On Voltage
- Ultra Fast Switching
- Hermetically Sealed
- Replacement for 1N5711 and 1N5712 with Improved Thermal Resistance
- Primary Intended for High Level UHF/VHF Detection and Pulse Applications with a Broad Dynamic Range
- TX, TXV, and S-Level Screening Available ^{2/}
- A Suffix = Selection for Low Cj- 1.2pF Max

Maximum Ratings ^{3/}

		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	SPD5711 SPD5712	V_{RRM} V_{RWM} V_R	50 15	Volts
Average Rectified Forward Current (Resistive Load, 60 Hz Sine Wave, $T_C = 25^\circ\text{C}$)	SPD5711 SPD5712	I_O	33 75	mAmps
Operating & Storage Temperature		$T_{OP} \& T_{STG}$	-65 to +150	$^\circ\text{C}$
Maximum Thermal Resistance, Junction to Lead, L = 3/8"		$R_{\theta JL}$	250	$^\circ\text{C/W}$

Notes:

1/ For ordering information, Price, Operating Curves, and Availability- Contact Factory.

2/ Screened to MIL-PRF-19500.

3/ Maximum Ratings and Electrical Characteristics @ 25°C Unless Otherwise Specified.

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

DATA SHEET #: RS0008B

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Solid State Devices, Inc.

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SPD5711, SPD5711A

And

SPD5712, SPD5712A

Electrical Characteristics ^{3/}	Symbol	SPD5711		SPD5712		Units
		Min	Max	Min	Max	
Blocking Reverse Voltage ($I_R = 10 \mu A$, $T_A = 25^\circ C$, 300 – 500 μs Pulse)	V_{BR}	70	—	20	—	V_{DC}
Instantaneous Forward Voltage Drop ($T_A = 25^\circ C$, 300 – 500 μs Pulse)	$I_F = 1 \text{ mADC}$ V_{F1}	—	0.41	—	0.41	V_{DC}
	$I_F = 15 \text{ mADC}$ V_{F2}	—	1.0	—	—	
	$I_F = 35 \text{ mADC}$ V_{F3}	—	—	—	1.0	
Instantaneous Forward Voltage Drop ($T_A = -55^\circ C$, 300 – 500 μs Pulse)	$I_F = 1 \text{ mADC}$ V_{F4}	—	0.55	—	0.55	V_{DC}
	$I_F = 15 \text{ mADC}$ V_{F5}	—	1.0	—	—	
	$I_F = 35 \text{ mADC}$ V_{F6}	—	—	—	1.0	
Reverse Leakage Current ($T_A = 25^\circ C$, $V_R = \text{Rated}$, 300 μs Minimum Pulse)	IR_1	—	200	—	150	nA
Reverse Leakage Current ($T_A = 100^\circ C$, $V_R = \text{Rated}$, 300 μs Minimum Pulse)	IR_2	—	200	—	150	μA
Junction Capacitance ($V_R = 0 \text{ VDC}$, $V_{SIG} = 50 \text{ mV}_{PK}$, $T_A = 25^\circ C$, $f = 1 \text{ MHz}$)	SPD5711 and SPD5712 C_{J1}	—	2.0	—	2.0	pF
	SPD5711A and SPD5712A C_{J2}	—	1.2	—	1.2	

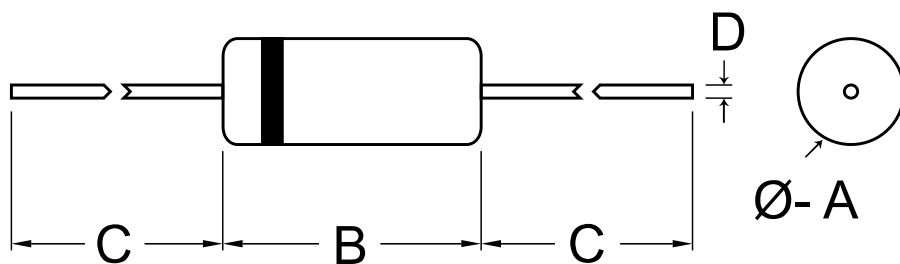
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Case Outline:



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

DIMENSIONS

DIM	MIN.	MAX.
A	0.068"	0.076"
B	0.150"	0.170"
C	1.00"	1.50"
D	0.014"	0.022"

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