Solid State Devices, Inc.
14701 Firestone Blvd * La Mirada, Ca 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

SPD3595

150 mA
125 VOLT
3 μsec STANDARD RECOVERY RECTIFIER

Designer's Data Sheet

Part Number/Ordering Information [1/]

SPD____ __ __

└ **Screening** [2/]
__ = Not Screened
TX = TX Level
TXV = TXV
S = S Level (for SM, use –S)

└ **Package Type**
__ = Axial Leaded
SM = Surface Mount Round Tab (MELF)
SMS = Surface Mount Square Tab

└ **Device Type** (VRWM)
3595 = 125 V

FEATURES:

- Standard Reverse Recovery Time: 3 μsec Max
- Hermetically Sealed
- Planar Passivated Chip
- For High Efficiency Applications
- Available in Axial, Subminiature Round Tab & Subminiature Square Tab Versions
- Faster Devices Available – Contact Factory
- TX, TXV, and S-Level Screening Available[2/]
- Replacement for 1N3595

MAXIMUM RATINGS [3/]

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage **DC Blocking Voltage**	V_{RWM} V_R	125	Volts
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave, T_C = 25°C)	I_O	150	mAmps
Peak Surge Current (t = 1sec, T_a = 25°C)	I_{FSM}	500	mAmps
Operating & Storage Temperature	T_{OP} and T_{STG}	-65 to +175	°C
Thermal Resistance Junction to End Tab (SM & SMS) Axial- Junction to Lead @ .375"	$R_{\theta JE}$ $R_{\theta JL}$	100 250	°C/W

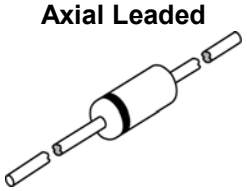
NOTES:

1/ For Ordering Information, Price, and Availability- Contact Factory.

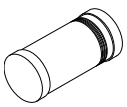
2/ Screening Based on MIL-PRF-19500. Screening Flows Available on Request.

3/ Unless Otherwise Specified, All Electrical Characteristics @25ºC.

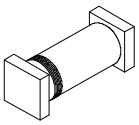
Axial Leaded



SM



SMS

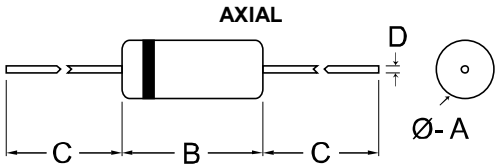


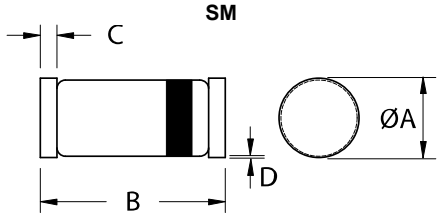
Solid State Devices, Inc.
14701 Firestone Blvd * La Mirada, Ca 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

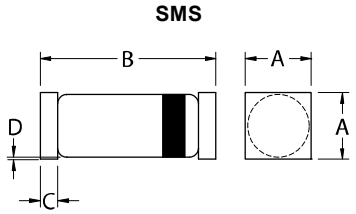
SPD3595

ELECTRICAL CHARACTERISTICS 3/

CHARACTERISTICS		SYMBOL	MIN	MAX	UNIT
Maximum Instantaneous Forward Voltage Drop (Pulsed, T_A = 25°C)	I_F = 200mA I_F = 100mA I_F = 50mA I_F = 10mA I_F = 5mA I_F = 1mA	V_{F1} V_{F2} V_{F3} V_{F4} V_{F5} V_{F6}	.83 .79 .74 .65 .60 .52	1.00 .92 .88 .80 .765 .70	Vdc
Minimum Breakdown Voltage Ir = 50 µA		B_{VR}	125	---	Vdc
Maximum Reverse Leakage Current (300 µs Pulse Minimum , T_A = 25°C)	V_R = 125V	I_{R1}	--	1.0	nA
Maximum Reverse Leakage Current (300 µs Pulse Minimum , T_A = 150°C)	V_R = 125V	I_{R2}	--	3	µA
Maximum Junction Capacitance (T_A = 25°C , f = 1MHz, V_R = 0V)		C_J	--	8.0	pf
Maximum Reverse Recovery Time (I_F = 10 mA, V_R = 35V, R = 1,000 Ω)		t_{rr}	--	3	µsec







DIM	AXIAL MIN	AXIAL MAX	SM MIN	SM MAX	SMS MIN	SMS MAX
A	.056”	.075”	.063”	.067”	.070”	.085”
B	.140”	.180”	.130”	.146”	.165”	.195”
C	1.00”	1.50”	.016”	.022”	.019”	.028”
D	.018”	.022”	.001”	---	.003”	---

Dimensions prior to soldering