



SSCTXXX2XD1

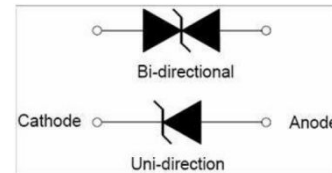
SSCTXXX2XD1 Series

4500W Transient Voltage Suppressor

● Description

TVS diodes can be used in a wide range of applications which like consumer electronic products, automotive industries, munitions, telecommunications, aerospace industries, and intelligent control systems.

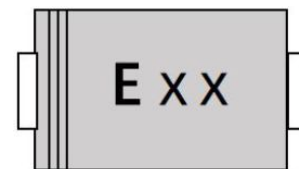
● PIN configuration



Top view

● Feature

- ◇ 4500W peak pulse power ($TP = 8/20 \mu s$)
- ◇ Glass passivated or planar junction
- ◇ Excellent clamping capability
- ◇ Repetition rate (duty cycle): 0.01%
- ◇ Low profile package and low inductance
- ◇ Fast response time: typically less than 1.0ps from 0V to VBR min.
- ◇ High temperature soldering: 260°C/10s at terminals.
- ◇ Plastic package has Underwriters Laboratory Flammability 94V-0.
- ◇ For surface mounted applications in order to optimize.



Marking

● Mechanical data

- ◇ Package: SOD-123FL
- ◇ Case Material: “Green” MoldingCompound.
- ◇ UL Flammability Classification Rating 94V-0
- ◇ Polarity: Color band denotes cathode except bi-directional models
- ◇ Weight: 0.017g

● Applications

- ◇ I/O Interface
- ◇ DVI & HDMI Port Protection
- ◇ AC/DC Power supply
- ◇ Mobile Handsets
- ◇ Digital Cameras and camcorders
- ◇ Low frequency signal transmission line (RS232, RS485, etc.)
- ◇ Digital TV and Set-top Boxes



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● Absolute maximum rating @TA=25°C

Symbol	Parameter	Value	Units
P _{PP}	Peak Pulse Power (8/20μS)	4500	W
T _{STG}	Storage Temperature	-55/+150	°C
T _J	Operating Temperature	-55/+150	°C

● Electrical Characteristics @TA=25°C

Part Number	Directional	Marking code	Reverse Stand Off Voltage V _{RWM} (V)	Breakdown Voltage V _{BR} @ I _T (V)		Test current I _T (mA)	Maximum Clamping Voltage V _{c@I_{PP}} (V)	Maximum Peak Pulse Current I _{PP} (8/20 μ s)	Maximum Reverse Leakage I _{R@V_{RWM}} (μ A)	Junction Capacitance C _J (pF)
				Min	Max					Typ.
SSCT7V021D1	Uni.	EHM	7.0	7.7	8.6	10	16.0	220	50	1650
SSCT7V022D1	Bi.	ETM	7.0	7.7	8.6	10	16.0	220	50	870
SSCT12V21D1	Uni.	EIE	12	13.3	14.7	1	24.0	190	1	1020
SSCT12V22D1	Bi.	EUE	12	13.3	14.7	1	24.0	190	1	490
SSCT15V21D1	Uni.	EIM	15	16.7	18.5	1	26.0	180	1	1000
SSCT15V22D1	Bi.	EUM	15	16.7	18.5	1	26.0	180	1	400
SSCT18V21D1	Uni.	EIT	18	20.0	22.1	1	30.0	160	1	650
SSCT18V22D1	Bi.	EUT	18	20.0	22.1	1	30.0	160	1	320
SSCT20V21D1	Uni.	EIV	20	22.2	24.5	1	35.0	150	1	310
SSCT20V22D1	Bi.	EUV	20	22.2	24.5	1	35.0	150	1	310
SSCT24V21D1	Uni.	EIZ	24	26.7	29.5	1	40.0	170	1	300
SSCT24V22D1	Bi.	EUZ	24	26.7	29.5	1	40.0	170	1	300
SSCT26V21D1	Uni.	EJE	26	28.9	31.9	1	44.0	130	1	290
SSCT26V22D1	Bi.	EVE	26	28.9	31.9	1	44.0	130	1	290
SSCT28V21D1	Uni.	EJG	28	31.1	34.4	1	48.0	120	1	280
SSCT28V22D1	Bi.	EVG	28	31.1	34.4	1	48.0	120	1	280



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- Typical Performance Characteristics

Figure 1: Peak Pulse Power Rating Curve

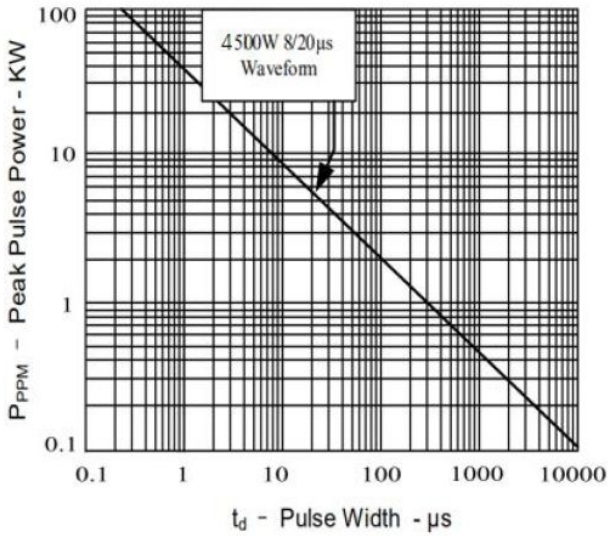


Figure 2: Pulse Derating Curve

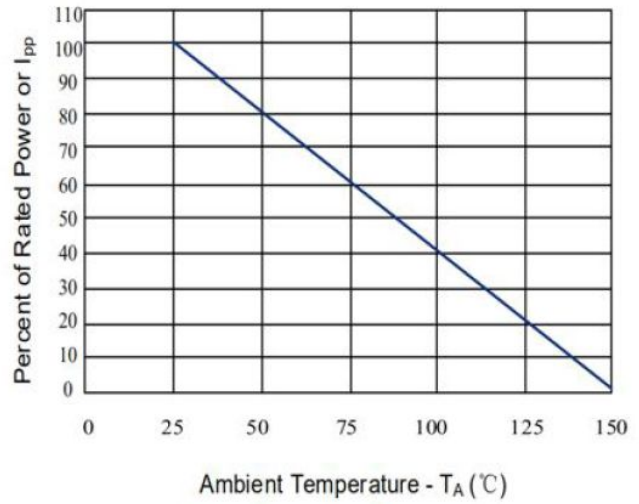


Figure 3: Peak Pulse Power Rating Curve

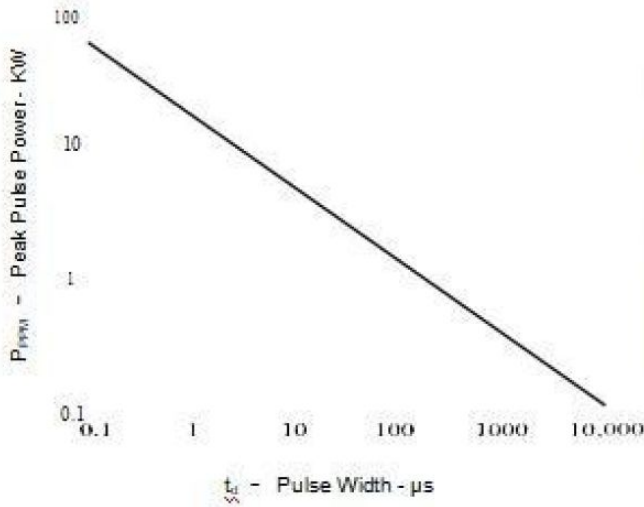
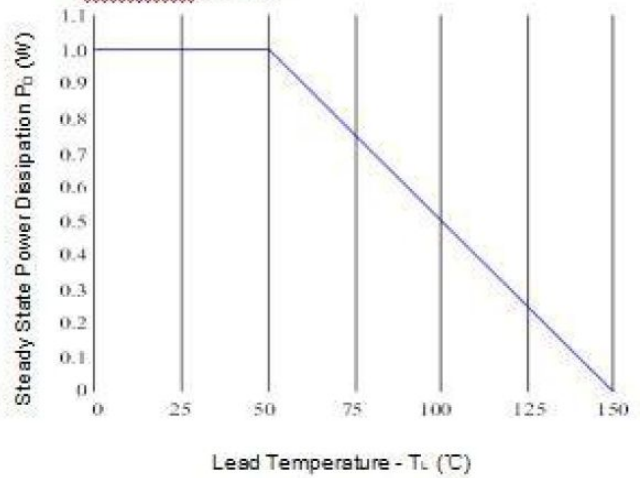


Figure 4: Steady State Power Dissipation Derating Curve





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- **Package Information**

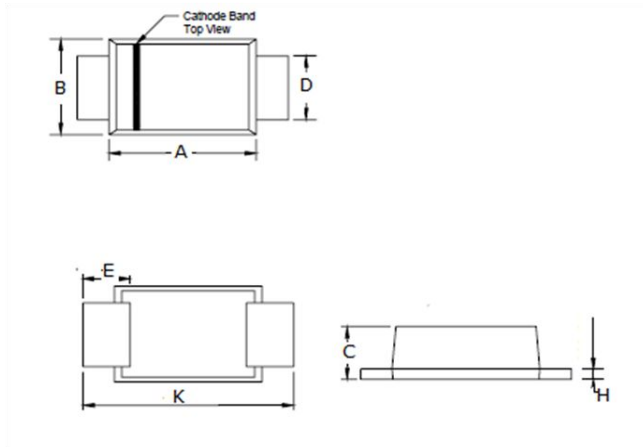
Ordering Information

Device	Package	Qty per Reel	Reel Size
SSCTXXX2XD1	SOD-123FL	3000	7 Inch

Mechanical Data

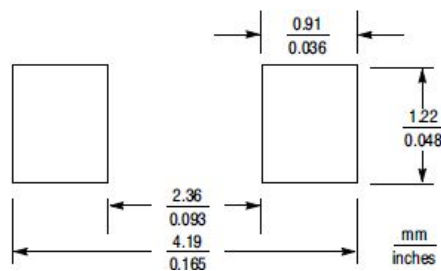
Case:SOD-123FL

Case Material: Molded Plastic. UL Flammability



Dim	Millimeters	
	Min	Max
A	2.5	3.0
B	1.5	1.9
C	0.9	1.1
D	0.70	1.1
E	0.45	0.95
H	0.05	0.26
K	3.40	4.0

Recommended Pad outline





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