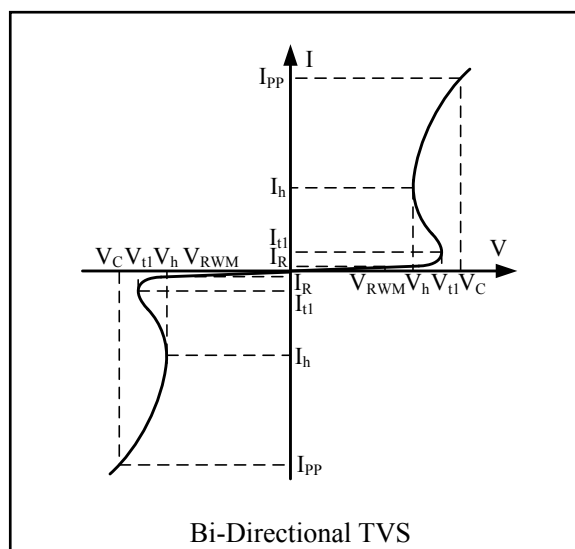


Absolute Maximum Rating

Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	± 30 ± 30	kV
I_{PP}	Peak Pulse Current(8/20us)	175	A
T_{OPT}	Operating Temperature	-55/+150	°C
T_{STG}	Storage Temperature	-55/+150	°C
T_L	Lead Soldering Temperature	260 (10 sec.)	°C

Electrical Characteristics (T = 25°C)

Symbol	Parameter
V_{RWM}	Nominal Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{t1}	Trigger Voltage
I_{t1}	Trigger Current @ V_{t1}
V_h	Holding Voltage
I_h	Holding Current @ V_h
V_C	Clamping Voltage @ I_{PP}
V_{CR}	Reverse Clamping Voltage @ I_{PP}
I_{PP}	Maximum Peak Pulse Current
C_{ESD}	Parasitic Capacitance



Symbol	Test Condition	Minimum	Typical	Maximum	Units
V_{RWM}				4.5	V
I_R	$V_{RWM} = 4.5V, T = 25^\circ C$		0.01	0.1	μA
V_{t1}	$I_{t1} = 1\mu A$	4.6	5.2	6.0	V
V_h	$I_h = 5mA$		5.2		V
V_C	$I_{PP} = 1A, t_p = 8/20\mu s$			8.0	V
V_C	$I_{PP} = 40A, t_p = 8/20\mu s$			10.0	V
V_C	$I_{PP} = 150A, t_p = 8/20\mu s$			20.0	V
C_{ESD}	$V_R = 0V, f = 1MHz$		300		pF

Typical Characteristics

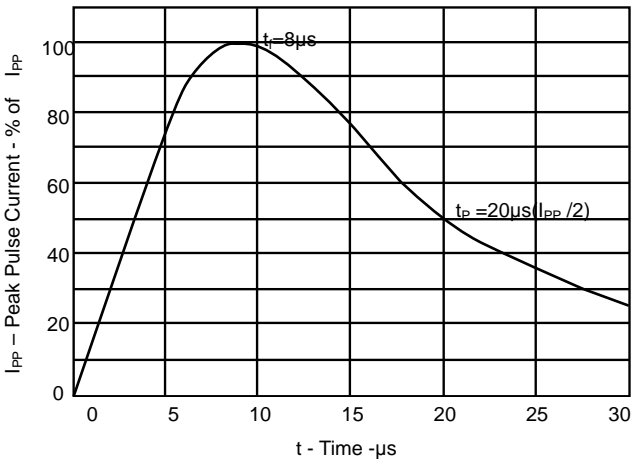


Fig 1. Pulse Waveform

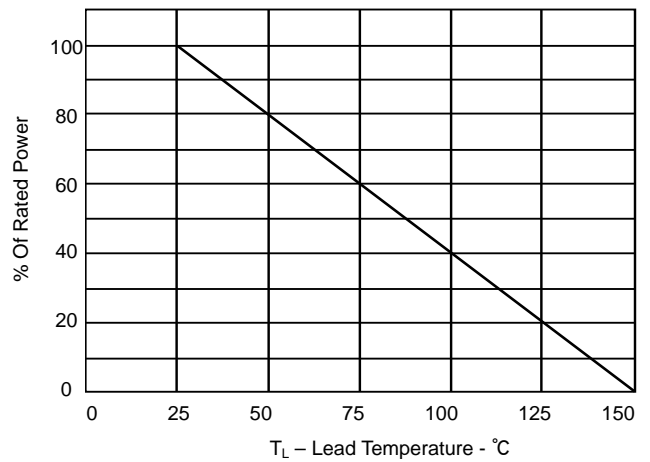


Fig 2. Power Derating Curve

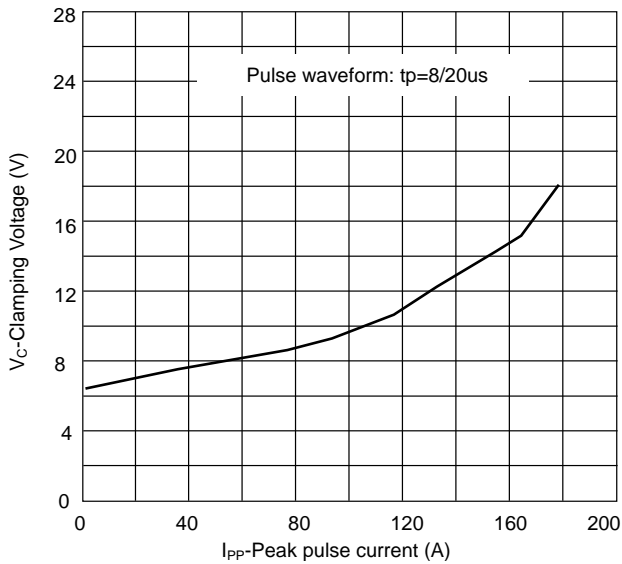


Fig 3. Clamping voltage vs. Peak pulse current

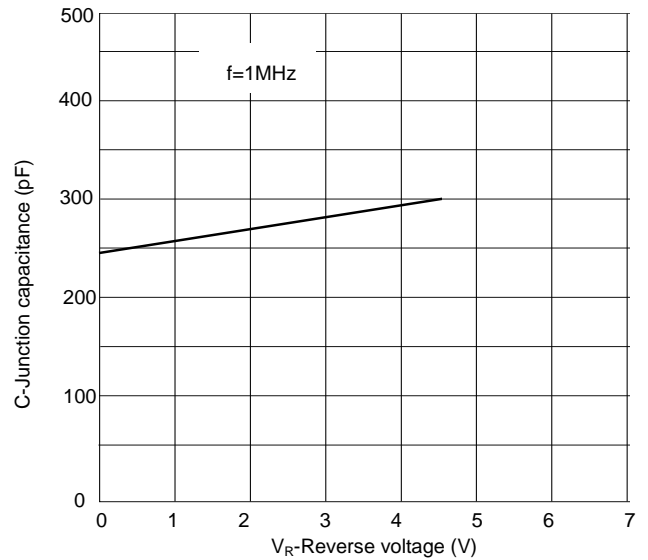


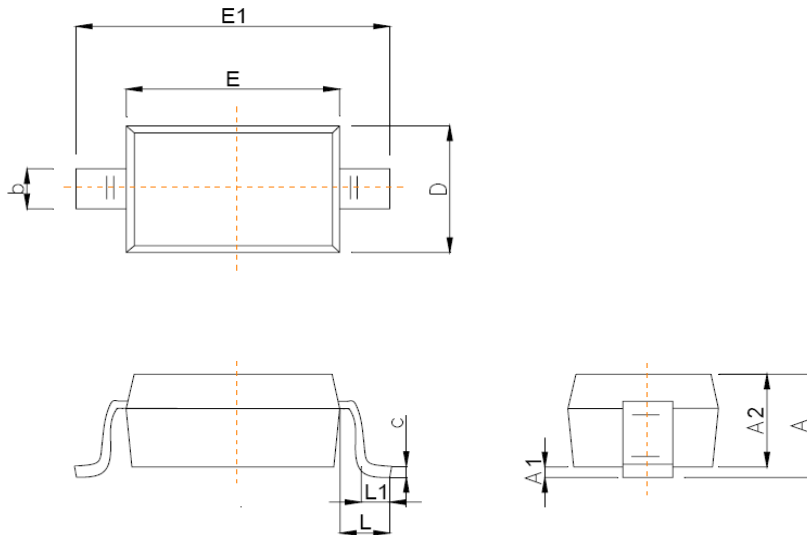
Fig 4. Capacitance vs. Reverse voltage

Package Outline

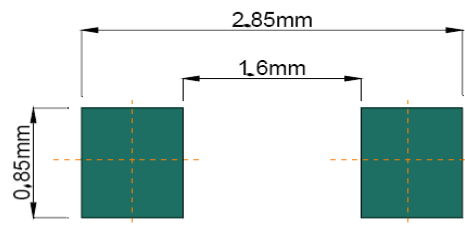
□ SOD-323 package



Package Outline Dimensions

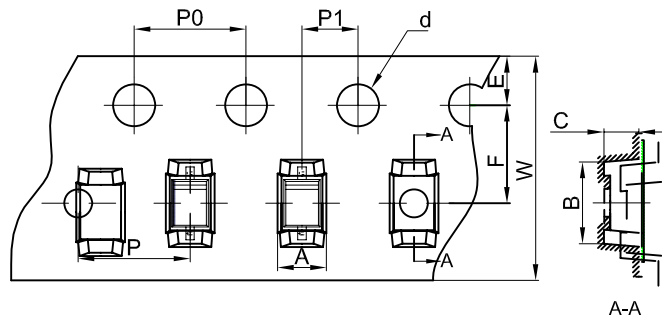


Symbol	Dimensions In Millimeters	
	Min	Max
A		1.00
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
e	1.800	2.040
L	0.475 REF	
L1	0.250	0.400
θ	0°	8°



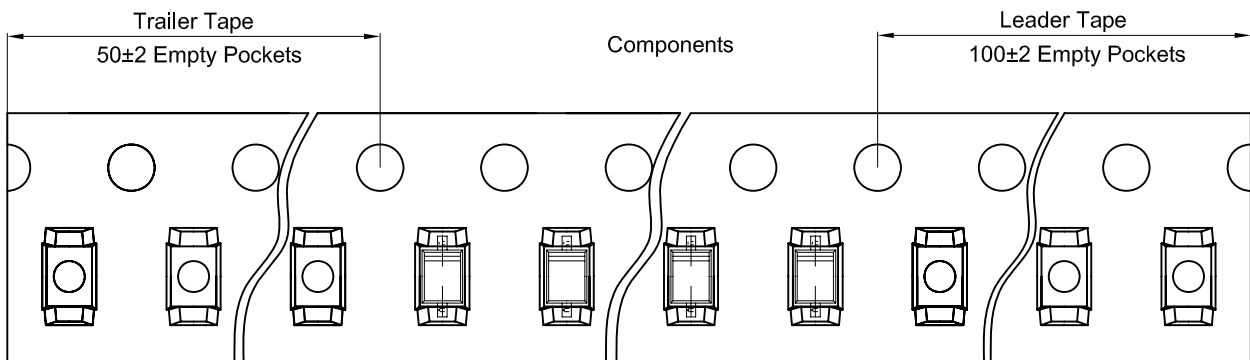
Recommended Pad outline

Tape and Reel Specification

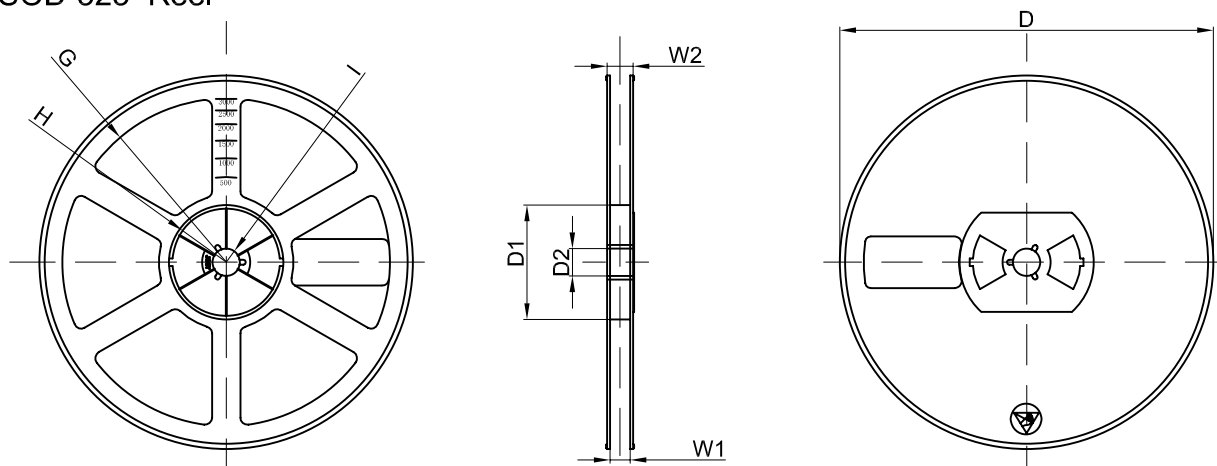


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.46	2.90	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
(Tolerance)	+/-0.05	+/-0.05	+/-0.05	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+0.3/-0.1

SOD-323 Tape Leader and Trailer

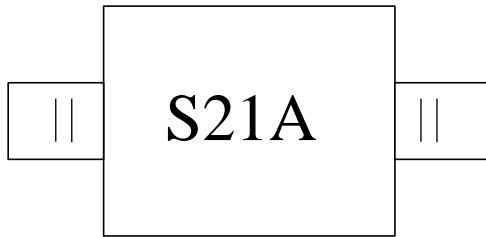


SOD-323 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30
Tolerance	+/-2	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	

Marking Codes


Note:

- (1) "S21A" is part number, fixed
- (2) no cathode line and date code

Ordering Information

Part Number	Working Voltage	Quantity Per Reel	Reel Size
TS0421LEX	4.5V	3,000	7 Inch