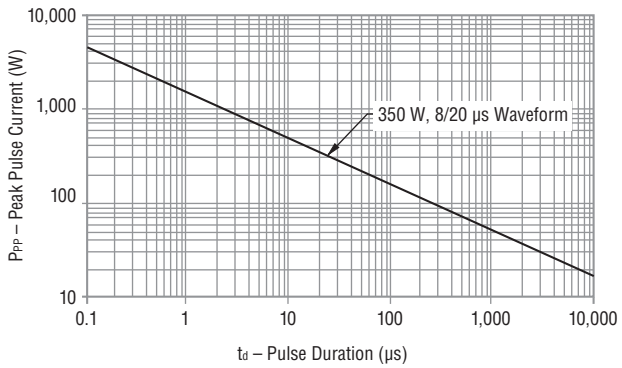
Electrical & Thermal Characteristics (@ T_A = 25 °C Unless Otherwise Noted)

Parameter	Symbol	CDSOD323-						Unit
		Uni-T15L	Bi-T15LC	Uni-T18L	Bi-T18LC	Uni-T24L	Bi-T24LC	
Min. Breakdown Voltage @ 1 mA	V_{BR}	16.7	16.7	20.0	20.0	26.7	26.7	V
Working Peak Voltage	V_M	15.0	15.0	18.0	18.0	24.0	24.0	V
Maximum Clamping Voltage @ I_P = 1 A	V_C	24.0	24.0	29.0	29.0	43.0	43.0	V
Typical Clamping Voltage @ 8/20 µs @ I_{PP}	V_C	31.8 V @ 10 A	31.8 V @ 10 A	45.0 V @ 8 A	45.0 V @ 8 A	56.0 V @ 6 A	56.0 V @ 6 A	V
Maximum Leakage Current @ V_{WM}	I_D	1						µA
Typical Capacitance @ 0 V, 1 MHz	C_J	1.0						pF

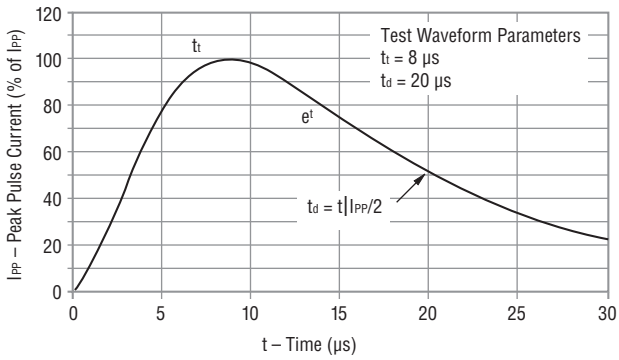
Notes:
1. Part numbers with suffix “C” indicate bidirectional device, i.e. CDSOD323-T05LC.
2. For bidirectional devices only, the electrical specifications apply in both directions.
3. Unidirectional only: Positive potential is applied from pin 1 to 2.

Performance Graphs

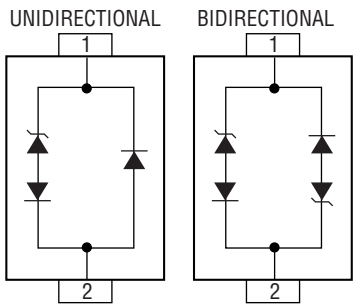
Peak Pulse Power vs. Pulse Time



Pulse Waveform



Block Diagram



How to Order

CD SOD323 - T 05 LC

Common Code
Chip Diode

Package
• SOD323 = SOD-323 Package

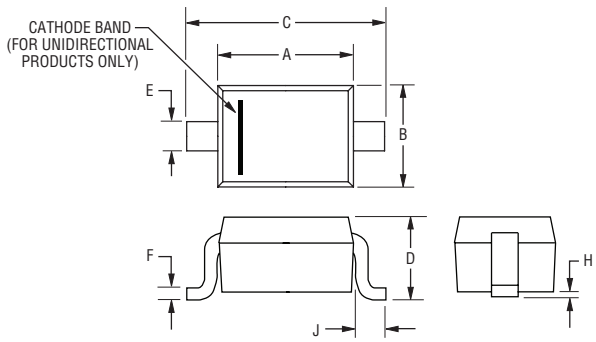
Model
T = Transient Voltage Suppressor

Working Peak Reverse Voltage
05 = 5 V_{RWM} (Volts)

Suffix
L = Ultralow Capacitance Unidirectional Diode
LC = Ultralow Capacitance Bidirectional Diode

Product Dimensions

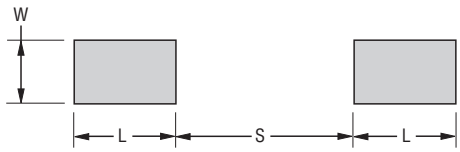
This is a molded JEDEC SOD-323 package with lead free 100 % Sn plating on the terminations. It weighs approximately 30 mg and has a flammability rating of UL 94V-0.



Dimensions	
A	1.60 - 1.90 (0.063 - 0.075)
B	1.15 - 1.45 (0.045 - 0.057)
C	2.39 - 2.70 (0.094 - 0.106)
D	0.92 - 1.14 (0.036 - 0.045)
E	0.25 - 0.40 (0.010 - 0.016)
F	0.08 - 0.20 (0.003 - 0.008)
H	0.13 (0.005) MAX.
J	0.30 - 0.45 (0.012 - 0.018)

DIMENSIONS: MM (INCHES)

Recommended Footprint



Dimensions (Nominal)	
L	0.80 (0.031)
S	1.40 (0.055)
W	0.50 (0.020)

DIMENSIONS: MM (INCHES)

Typical Part Marking

Each device has device marking outlined below and the unidirectional devices have an additional Polarity Band indicating the cathode.

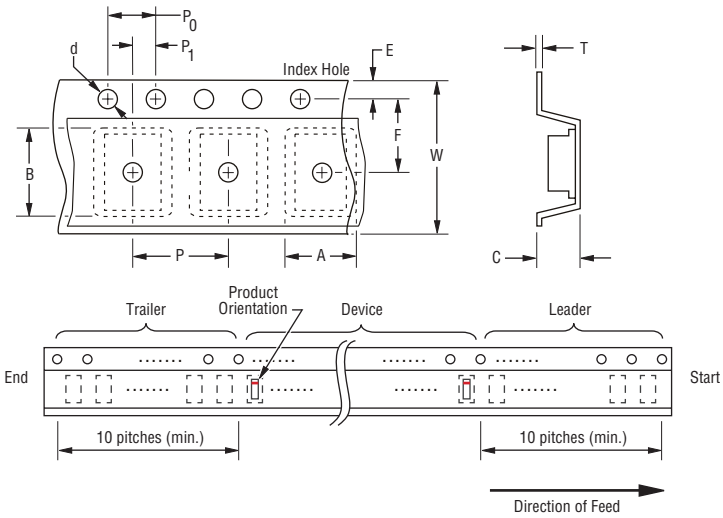
CDSOD323-T05L T5
CDSOD323-T05LC S5
CDSOD323-T08L T8
CDSOD323-T08LC S8
CDSOD323-T12L T12
CDSOD323-T12LC S12
CDSOD323-T15L T15
CDSOD323-T15LC S15
CDSOD323-T18L T18
CDSOD323-T18LC S18
CDSOD323-T24L T24
CDSOD323-T24LC S24

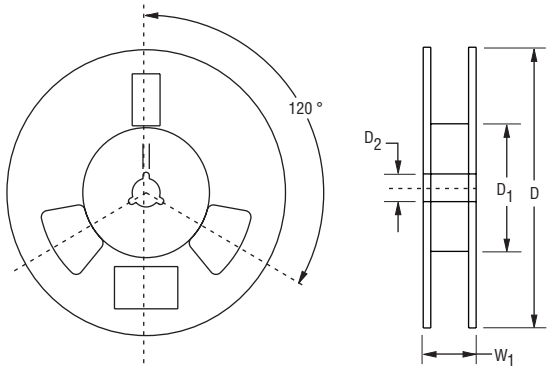
Environmental Specifications

Moisture Sensitivity Level 1
ESD Classification (HBM) 3B

Packaging Information

The surface mount product is packaged in an 8 mm x 4 mm tape and reel format per EIA-481 standard.





DIMENSIONS: MM / (INCHES)

Devices are packed in accordance with EIA standard RS-481-A.

Item	Symbol	SOD323
Carrier Width	A	1.55 ± 0.10 (0.061 ± 0.004)
Carrier Length	B	2.90 ± 0.10 (0.114 ± 0.004)
Carrier Depth	C	1.35 ± 0.10 (0.053 ± 0.004)
Sprocket Hole	d	1.55 ± 0.05 (0.061 ± 0.002)
Reel Outside Diameter	D	178 (7.008)
Reel Inner Diameter	D_1	80.0 (3.150) Min.
Feed Hole Diameter	D_2	13.0 ± 0.20 (0.512 ± 0.008)
Sprocket Hole Position	E	1.75 ± 0.10 (0.069 ± 0.004)
Punch Hole Position	F	3.50 ± 0.05 (0.138 ± 0.002)
Punch Hole Pitch	P	4.00 ± 0.10 (0.157 ± 0.004)
Sprocket Hole Pitch	P_0	4.00 ± 0.10 (0.157 ± 0.004)
Embossment Center	P_1	2.00 ± 0.05 (0.079 ± 0.002)
Overall Tape Thickness	T	0.20 ± 0.10 (0.008 ± 0.004)
Tape Width	W	8.00 ± 0.20 (0.315 ± 0.008)
Reel Width	W_1	13.5 (0.531) Max.
Quantity per Reel	--	3,000

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