

DESCRIPTION

The SE26T30B5.0LD1 is a dual USB port protection array that features ultra low capacitance. This device can be used in applications such as video cards , SMART phones , Gigabit Ethernet and other computer interfaces . Designed for ESD protection , the SE26T30B5.0LD1 can clamp the effects of electrical fast transients on the power bus.

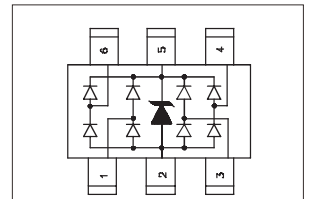
The SE26T30B5.0LD1 combines 8 low capacitance steering diodes for up to four individual data or transmission lines and one TVS diode for power bus protection . This device is available in the space-saving SOT-23-6 package configuration, which minimizes lead inductance to prevent overshoot voltages during high ESD current events.



SOT-23-6 PACKAGE

FEATURES

- >300 Watts peak pulse power(tp=8/20μs)
- >Protects four I/O lines
- >Low clamping voltage
- >Small package: SOT23-6L
- >Low leakage current
- >Weight 16 Milligrams



PIN CONFIGURATIONS

APPLICATIONS

- >USB 2.0 Power and Data Line Protection
- >Video Graphics Cards
- >Monitors and Flat Panel Displays
- >Digit Video Interface (DVI)
- >10/100/1000 Ethernet
- >Notebook Computers
- >ATM Interfaces

IEC COMPATIBILITY

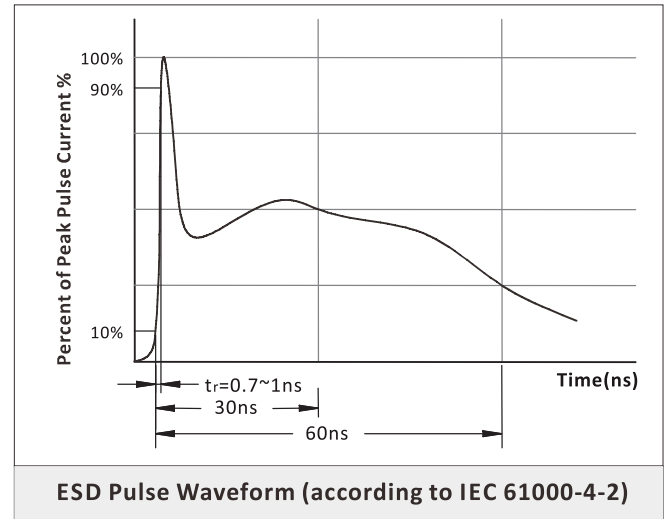
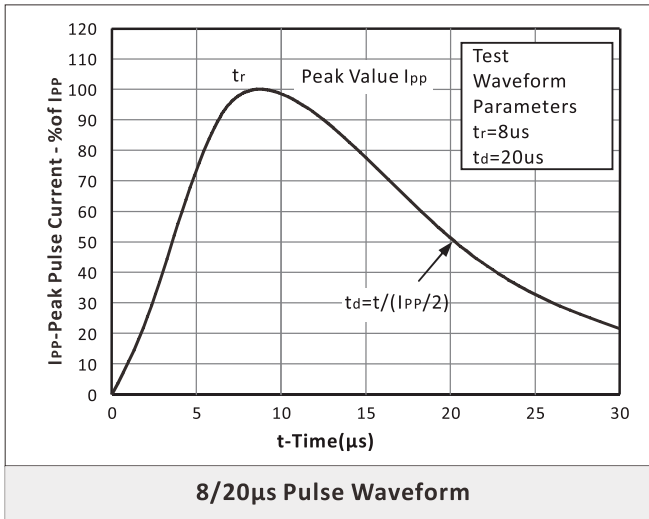
- >IEC 61000-4-2(ESD)±15KV(air),±8KV(contact)
- >IEC61000-4-4 (EFT) 40A (5/50ns)
- >IEC61000-4-5 (Lightning) 12A (8/20μs)

TYPICAL DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C UNLESS OTHERWISE SPECIFIED			
PARAMETER	SYMBOL	VALUE	UNIT
Peak Pulse Power (tp=8/20μs waveform)	P _{PP}	300	Watts
Lead Soldering Temperature	T _L	260(10 sec.)	°C
Operating Temperature Range	T _J	-55~125	°C
Storage Temperature Range	T _{STG}	-55~150	°C

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C UNLESS OTHERWISE SPECIFIED								
PART NUMBER	V _{RWM} (V) Max.	V _B (V) Min.	I _T (mA)	V _F (V) Max.	V _C		I _R (uA) Max.	C _T (pF) Max.
					Max.	@A		
SE26T30B5.0LD1	5.0	6.0	1	1.5	24.8	12	1	3.0

CHARACTERISTIC CURVES

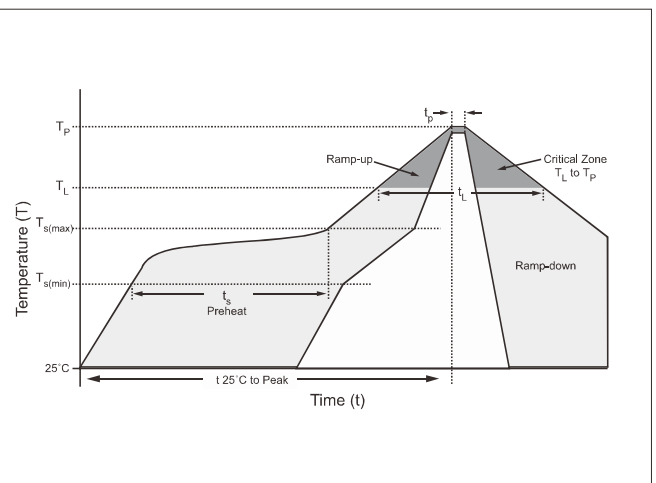


ENVIRONMENTAL CHARACTERISTICS

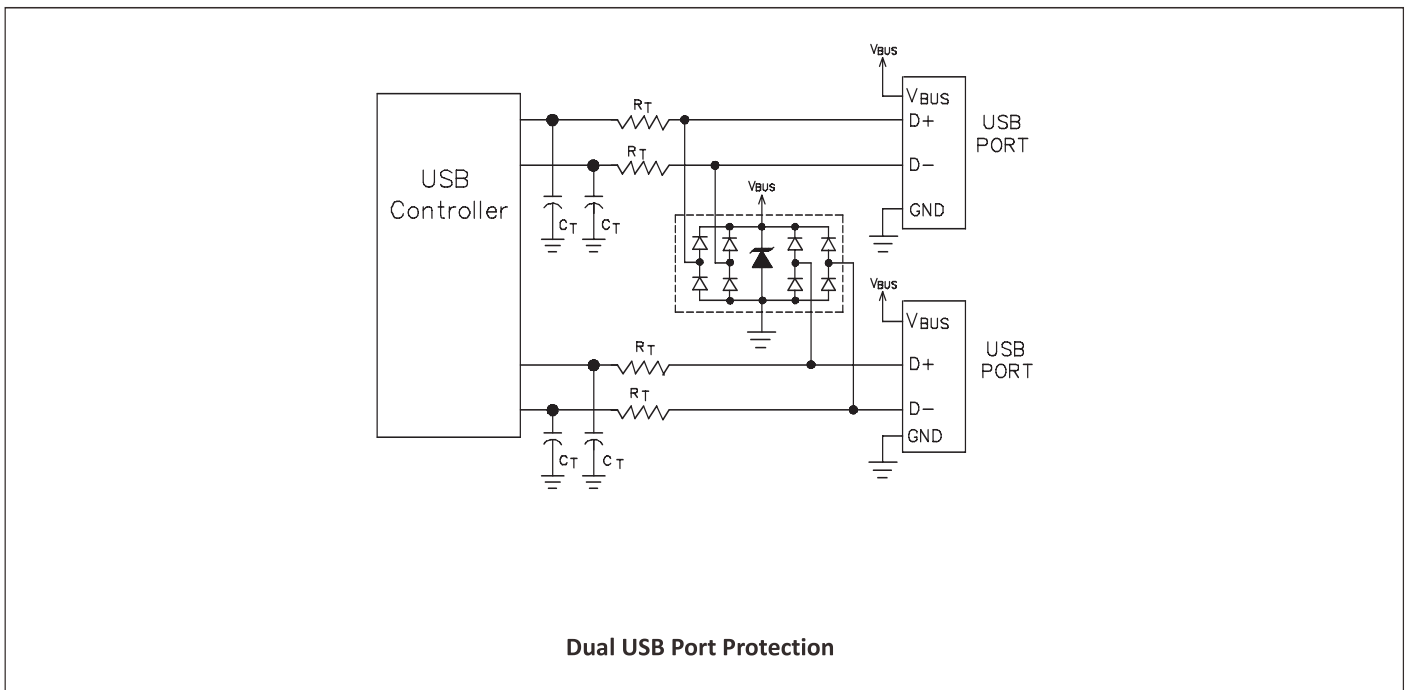
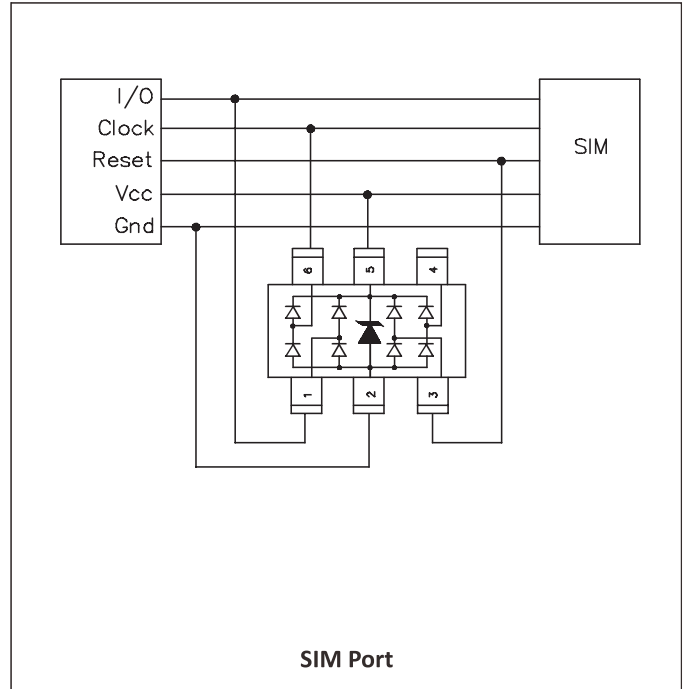
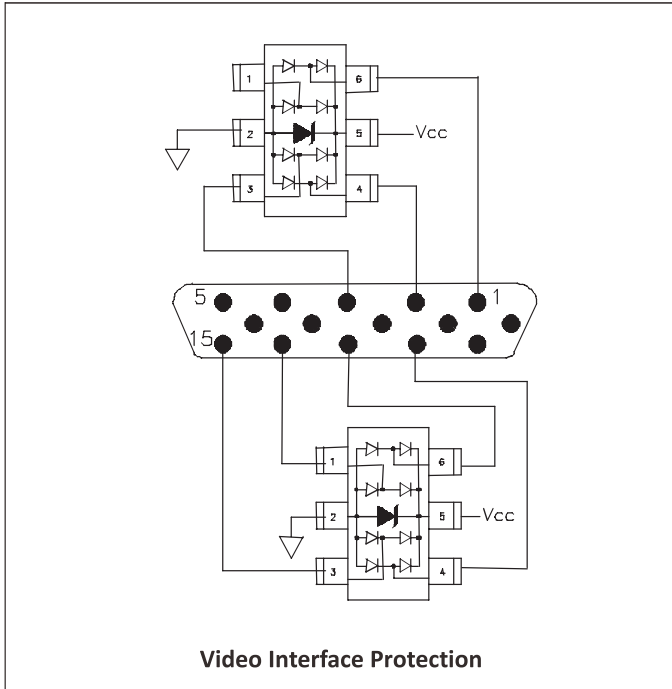
Testing Items	Technical Standards
High Temperature Reverse Bias Test	Temperature:150±3°C,Bias=80%VDRM ;Time:168H
High Temperature Life Test	Temperature:150°C;Time:168H
High-Low Temperature Cycle Test	Temperature:From -40°C to 150°C ;Dwell Time:30min,10-100 Cycles
High Temperature&High Humidity Test	Temperature:85°C.Humidity:85%; Time:168H
Pressure Cooker Test	Temperature:121°C,2 atm.Humidity:100%; Time:24H To 168H
Resistance Of Soldering Heat	Temperature:260±5°C;Time Of Dip Soldering:10s,3 Times

REFLOW PROFILE

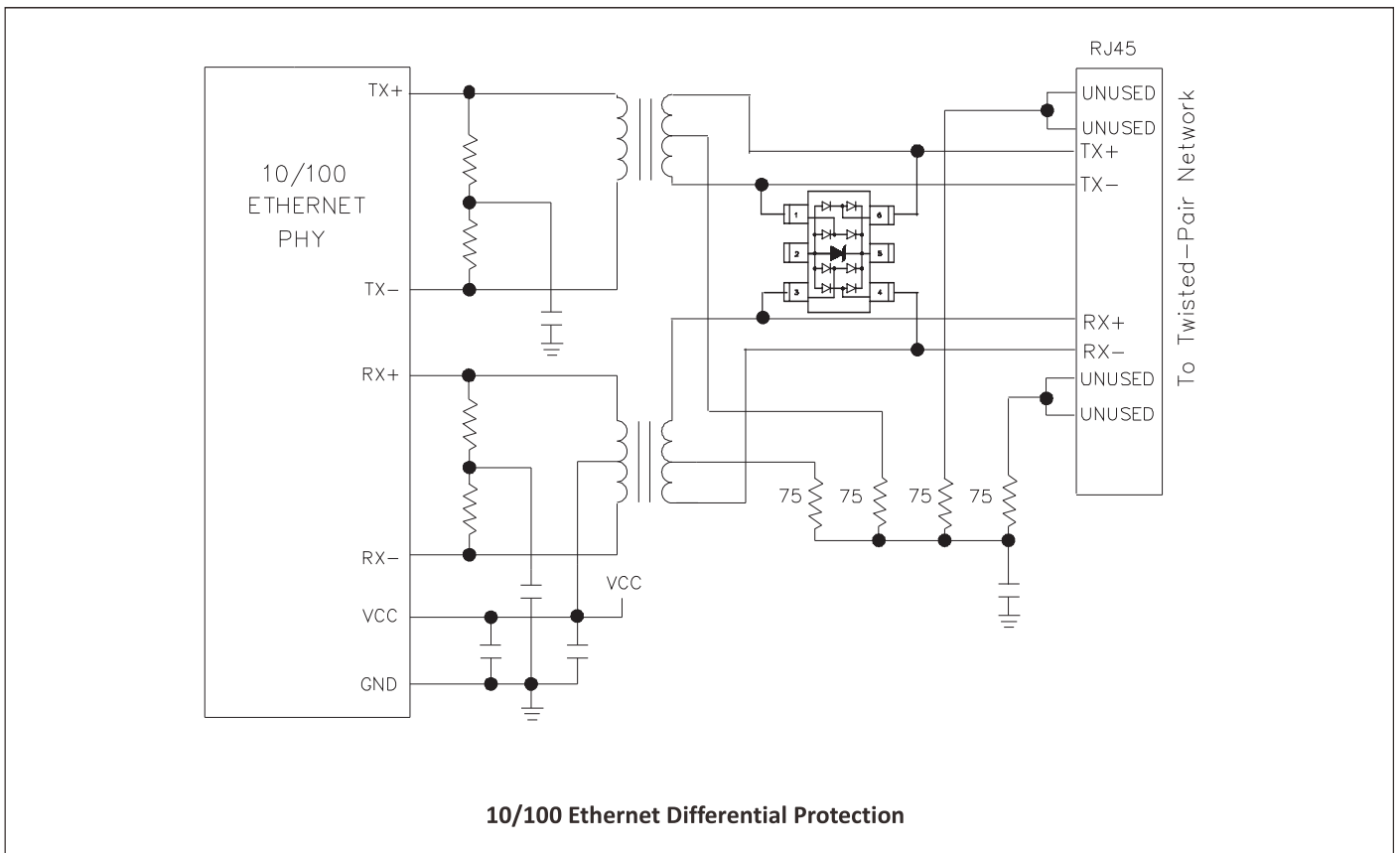
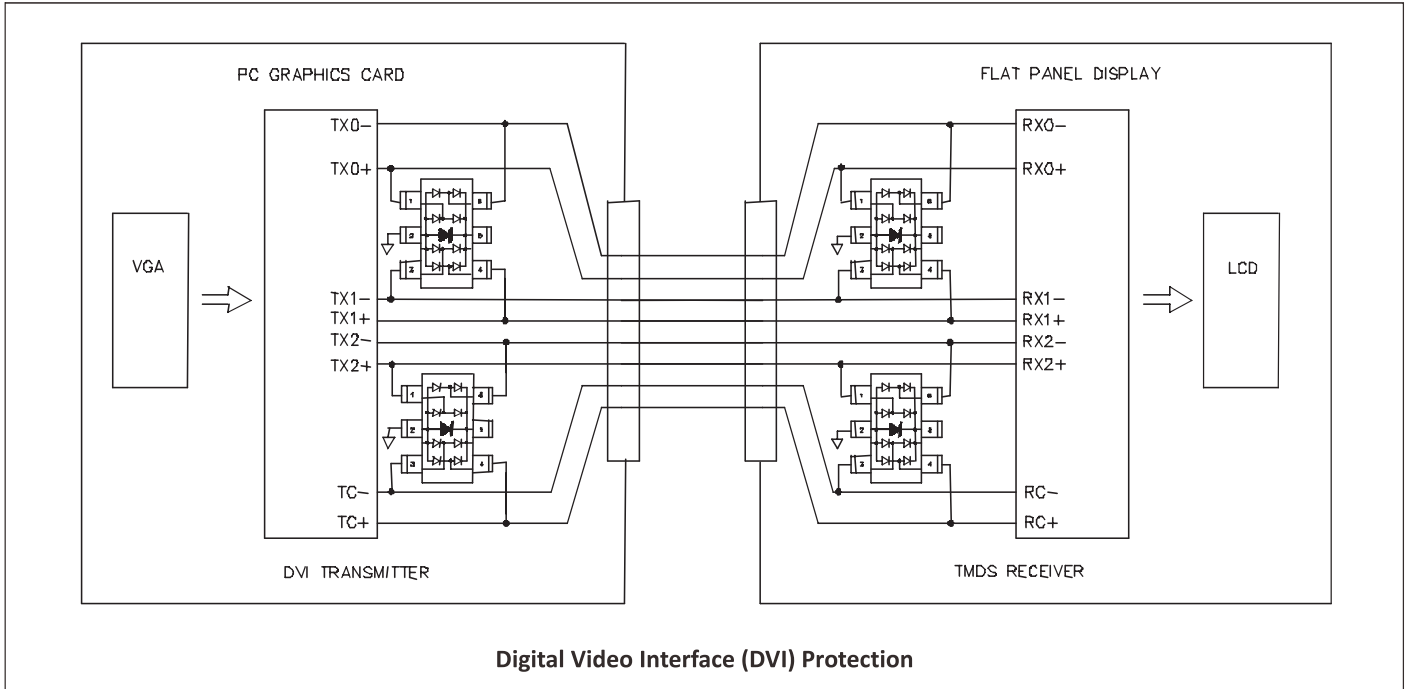
Reflow Condition		Lead-free assembly
Pre Heat	Temperature Min (Ts(min))	150°C
	Temperature Max (Ts(max))	200°C
	Time (min to max) (ts)	60 – 180 secs
Average ramp up rate (Liquidus Temp (TL) to peak)		3°C/second max
Ts(max)to TL - Ramp-up Rate		3°C/second max
Reflow	Temperature (TL) (Liquidus)	217°C
	Time (min to max) (ts)	60 – 150 seconds
Peak Temperature (TP)		260°C
Time within 5°C of actual peak Temperature (tp)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (TP)		8 minutes Max.
Do not exceed		260°C



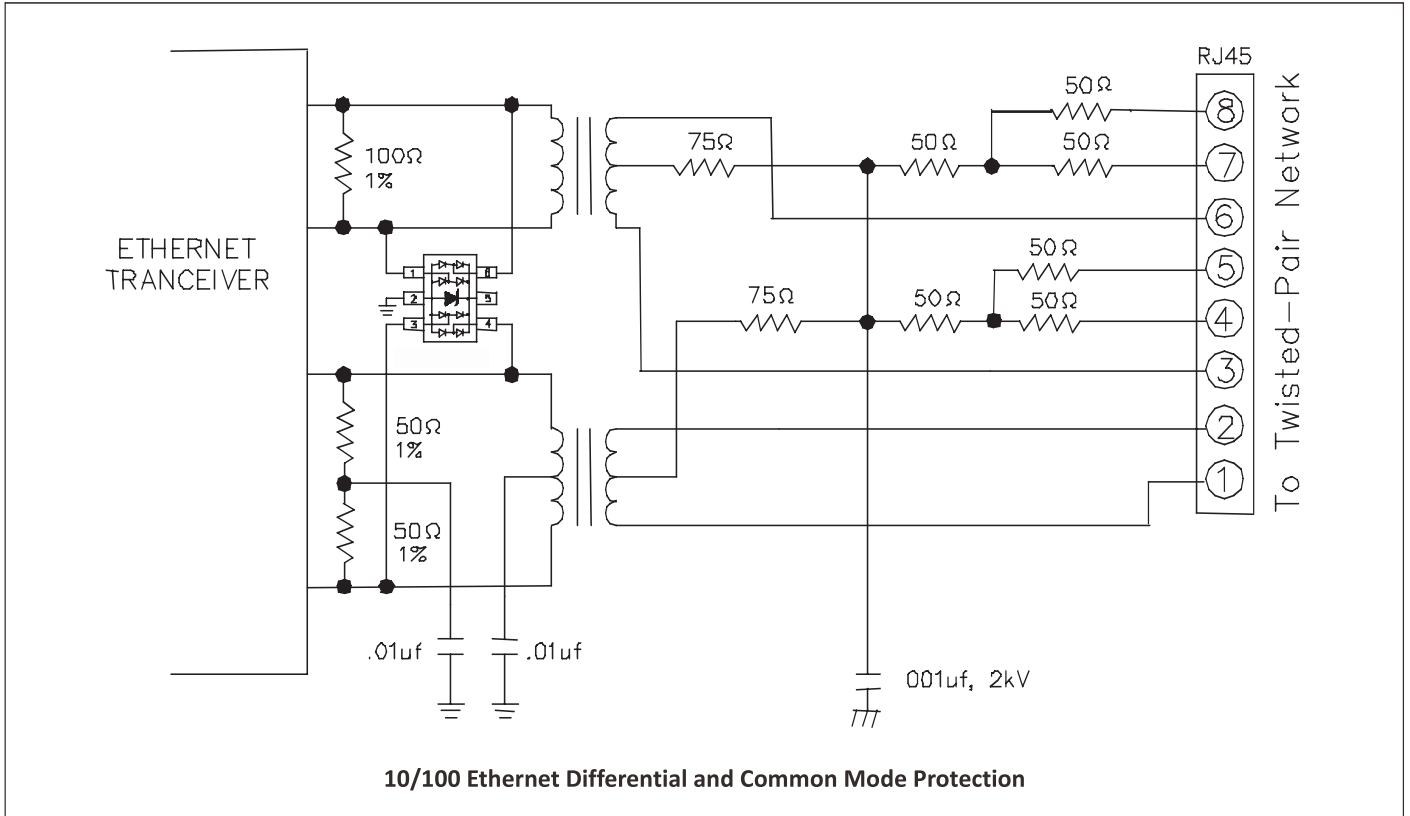
TYPICAL APPLICATIONS



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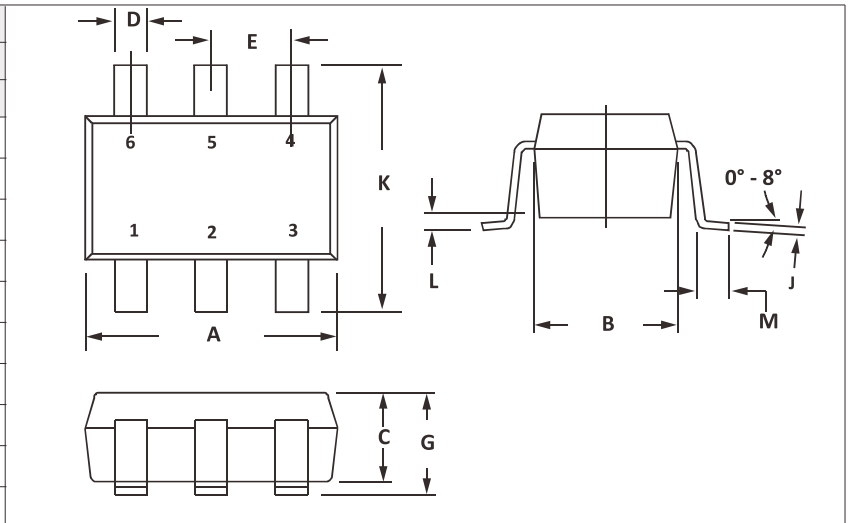


TYPICAL APPLICATIONS

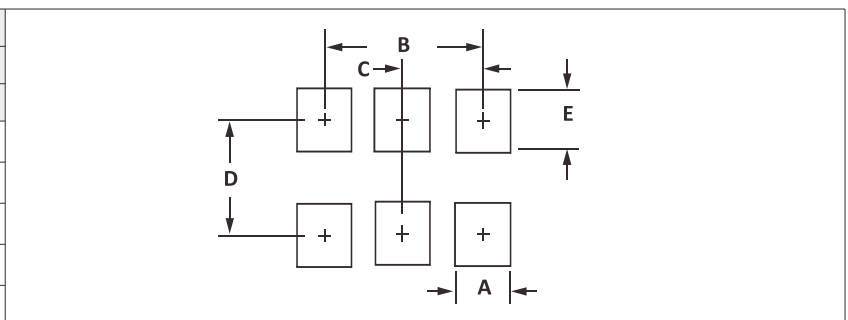


SOT-23-6 PACKAGE INFORMATION

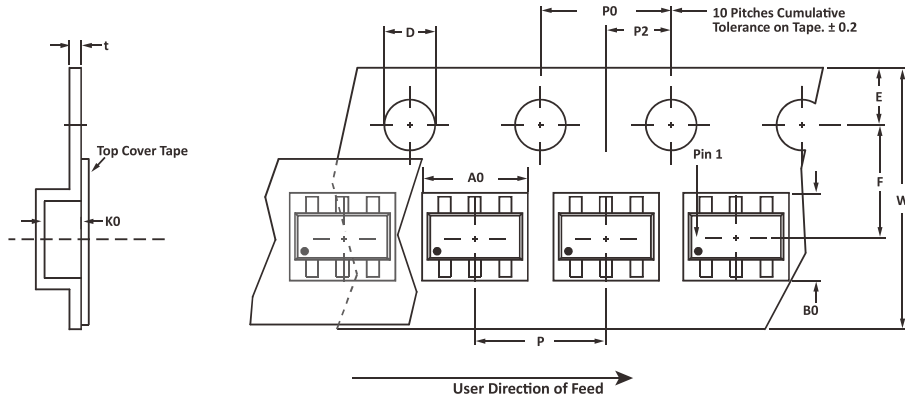
OUTLINE DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.80	3.05	0.110	0.120
B	1.50	1.75	0.059	0.070
C	0.90	1.30	0.036	0.051
D	0.30	0.40	0.012	0.016
E	0.85	1.05	0.033	0.040
G	0.90	1.45	0.036	0.057
J	0.09	0.20	0.003	0.008
K	2.60	3.00	0.102	0.118
L	0.0	0.15	0.0	0.006
M	0.30	0.60	0.012	0.024



PAD LAYOUT DIMENSIONS		
DIM	MILLIMETERS	INCHES
	NOMINAL	NOMINAL
A	0.70	0.028
B	1.90	0.074
C	0.95	0.037
D	2.40	0.094
E	1.00	0.039



TAPE AND REEL



SPECIFICATIONS

REEL DIA.	TAPE WIDTH	A0	B0	K0	D	E	F	W	P0	P2	P	tmax
178mm (7")	8mm	3.20 ± 0.10	3.20 ± 0.10	1.65 ± 0.10	1.50 ± 0.10	1.75 ± 0.10	3.50 ± 0.05	8.00 ± 0.30	4.00 ± 0.10	2.00 ± 0.05	4.00 ± 0.10	0.25

NOTES

- Dimensions are in millimeters.
- Surface mount product is taped and reeled in accordance with EIA-481.
- Suffix - T7 = 7" Reel - 3,000 pieces per 8mm tape.

ORDERING INFORMATION

BASE PART NUMBER	LEAD FREE SUFFIX	TAPE SUFFIX	QTY/REEL	REEL SIZE	TUBE QTY
SE26T30B5.0LD1	-LF	-T7	3,000	7"	n/a

This device is only available in a Lead-Free configuration.

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