

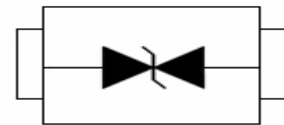


FEATURES

- Small body outline dimensions:
0.063 × 0.032 (1.6×0.8 mm)
- Protects one bi-directional I/O line
- Low clamping voltage
- Working voltage: 12V
- Low leakage current
- RoHS compliant



SOD-523



Pin Configuration

MAIN APPLICATIONS

- LED light bar
- Cell phone handsets and accessories
- Microprocessor based equipment
- Personal digital assistants (PDA's)
- Notebooks, desktops, and servers
- Portable instrumentation
- Peripherals
- Digital cameras

PROTECTION SOLUTION TO MEET

- IEC61000-4-2 (ESD) ±20kV (air), ±20kV (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5 (Lightning) 5A (8/20µs)

MECHANICAL CHARACTERISTICS

- SOD-523 package
- Marking code: 12X

ABSOLUTE MAXIMUM RATINGS ($T_A=25$, RH=45%-75%, unless otherwise noted)

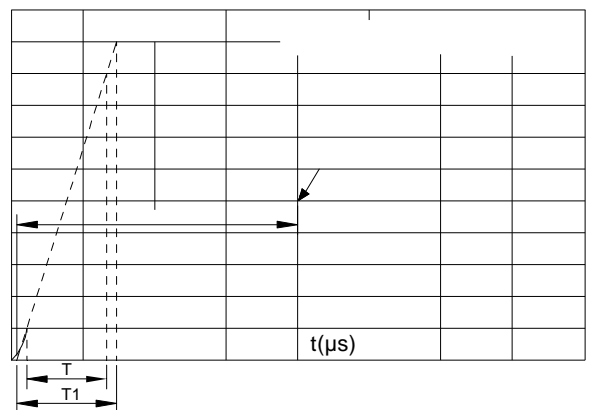
Parameter	Symbol	Value	Unit
Peak pulse power dissipation at 8/20 μ s waveform	P_{PP}	100	W
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	+/- 20 +/- 20	kV
Lead soldering temperature	T_L	260 (10 sec.)	
Operating junction temperature range	T_J	-55 to +125	
Storage temperature range	T_{STG}	-55 to +150	

ELECTRICAL CHARACTERISTICS ($T_A=25$)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse working voltage	V_{RWM}				12	V
Reverse breakdown voltage	V_{BR}	$I_T=1mA$	13.3			V
Reverse leakage current	I_R	$V_{RWM}=12V$			0.1	μA
Clamping voltage	V_C	$I_{PP}=5A, t_p=8/20\mu s$		22	26	V
Junction capacitance	C_J	$V_{RWM}=0V, f=1MHz$		10	20	pF

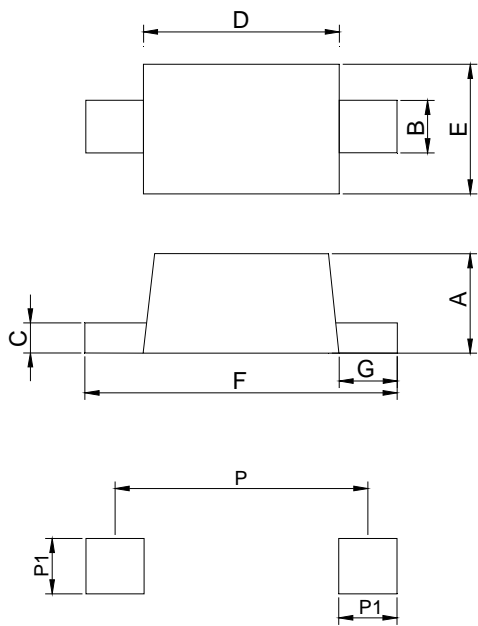
RATINGS AND V I CHARACTERISTICS CURVES ($T_A=25$, unless otherwise noted)

FIG.2: M M



JEB12D5 for ESD Protection

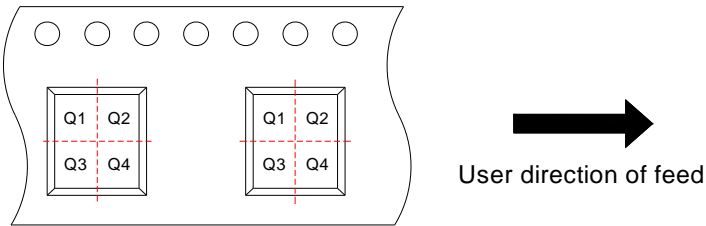
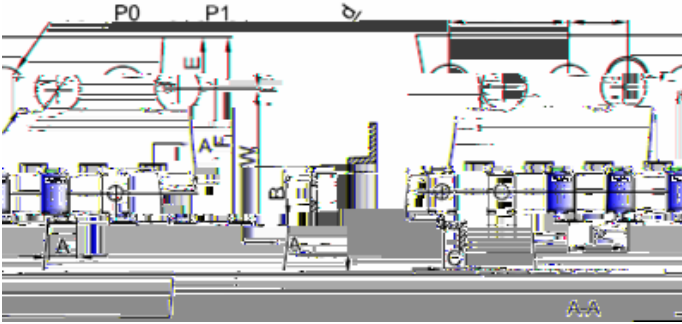
PACKAGE MECHANICAL DATA



Land Pattern

Symbol	Millimeters			Inches		
	Min	Typ	Max	Min	Typ	Max
A	0.50	0.61	0.77	0.020	0.024	0.030
B	0.25	0.30	0.40	0.010	0.012	0.016
C	0.07	0.13	0.20	0.003	0.005	0.008
D	1.10	1.20	1.30	0.043	0.047	0.051
E	0.70	0.80	0.90	0.028	0.031	0.035
F	1.50	1.60	1.70	0.059	0.063	0.067
G	0.15	0.20	0.25	0.006	0.008	0.010
P1	0.60			0.024		
P	1.42			0.056		

TAPE AND REEL SPECIFICATION SOD 523

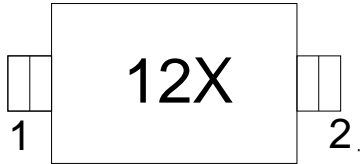


Pin 1 quadrant:Q1&Q2

ORDERING INFORMATION

PART No.	PACKAGE TYPE	QUANTITY(PCS) REEL	DESCRIPTION
JEB12D5	SOD-523	8,000	7 inch reel pack

MARKING CODE

Part Number	Marking Code
JEB12D5	

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