



Micro Commercial Components

Micro Commercial Components 20736 Marilla Street Chatsworth

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ESD12VLB

Features

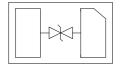
- · Protects one data or power line
- Low clamping voltage
- Ultra low leakage: nA level
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5(Lightning) 14A (8/20us)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

- Junction Temperature: -55°C to +125°C
- StorageTemperature: -55°C to +150°C

Parameter		Symbol	Limits	unit	
IEC61000-4-2(ESD)	Contact	1/	±30	14/7	
	Air	V _{ESD}	±30	KV	
Peak Pulse Power (8/20us)		P_{pk}	350	W	
Peak Pulse Current (8/20us)		I _{pp}	14	Α	

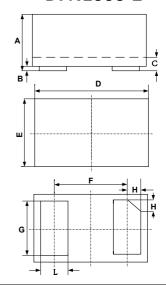
Circuit and Pin Schematic



Marking Code: T2

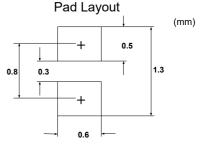
ESD Protection Device

DFN1006-2



DIMENSIONS					
DIM	INCHES		M	NOTE	
DIM	MIN	MAX	MIN	MAX	NOTE
A	0.018	0.022	0.45	0.55	
В	0.000	0.002	0.00	0.05	
С	0.005	0.007	0.12	0.18	
D	0.037	0.041	0.95	1.05	
Е	0.022	0.026	0.55	0.65	
F	0.026 REF.		0.650 REF.		
G	0.018	0.022	0.45	0.55	
Н	0.003	0.007	0.07	0.17	
L	0.008	0.012	0.20	0.30	

Suggested Solder

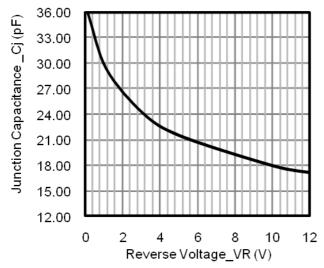




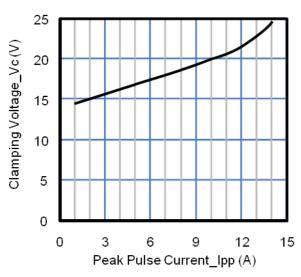
Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			12	V	
Breakdown Voltage	VBR	13.3			V	IT = 1mA
Reverse Leakage Current	I _R			100	nA	VRWM = 12V
Clamping Voltage	Vc			15	V	IPP = 1A (8 x 20µs pulse)
Clamping Voltage	Vc			25	V	IPP = 14A (8 x 20µs pulse)
Junction Capacitance	Cı		36	50	pF	VR = 0V, f = 1MHz

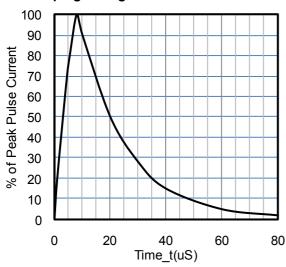




Junction Capacitance vs. Reverse Voltage

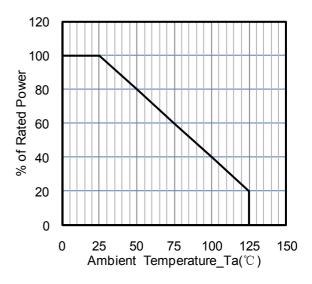


Clamping Voltage vs. Peak Pulse Current

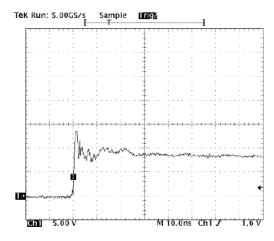


8 X 20uS Pulse Waveform

Typical Performance Characteristics (T_A=25°C unless otherwise Specified)



Power Derating Curve



ESD Clamping Voltage 8 kV Contact per IEC61000-4-2



Ordering Information:

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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