



DWPMB0540D8 ESD Protection Diode

Feature

- Uni-directional ESD protection of four lines
- 50Watts peak pulse power ($t_p = 8/20\mu s$)
- Working voltage: 5V
- Junction Capacitance: 0.2pF(Typ)
- Low clamping voltage
- IEC 61000-4-2 $\pm 8kV$ contact $\pm 15kV$ air
- IEC 61000-4-5 (Lightning) 3A (8/20 μs)
- IEC 61000-4-4 (EFT) 40A

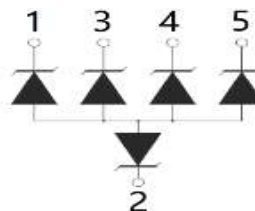
Application

- High Definition Multi-Media Interface (HDMI1.4/HDMI 2.0)
- USB 1.1/2.0/3.0/3.1 Interfaces
- IEEE 1394 Firewire Ports
- Projection TV Monitors and Flat Panel Displays
- Notebook Computers
- Set Top Box

Mechanical Data

- Package: DFN2010-5L
- Molding compound flammability rating: UL 94V-0
- RoHS/WEEE Compliant

Schematic & PIN Configuration



Ordering Information

Part Number	Package	Marking	Packing	Reel Size
DWPMB0540D8	DFN2010-5L	4R2N	3000 Tape & Reel	7 inches



Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

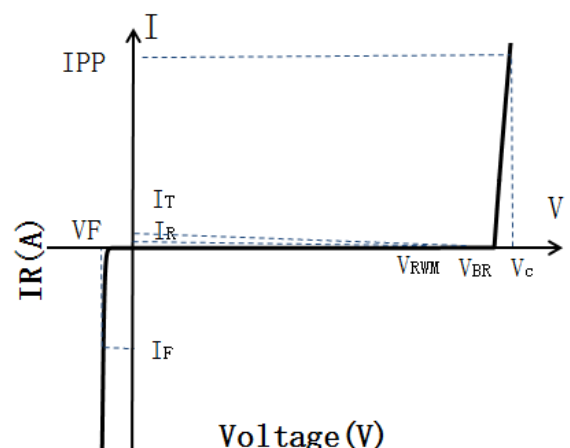
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	Ppk	50	W
Peak Pulse Current (8/20 μs)	I _{PP}	3	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V _{ESD}	± 15 ± 8	kV
Operating Temperature Range	T _J	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	T _{stg}	-55 to +150	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V _{RWM}				5.0	V
Breakdown Voltage	V _{BR}	I _T = 1mA	6.0			V
Reverse Leakage Current	I _R	V _{RWM} = 5V			0.2	μA
Clamping Voltage	V _C	I _{PP} = 1A (8 x 20 μs pulse)		11.0	14.0	V
Clamping Voltage	V _C	I _{PP} = 3A (8 x 20 μs pulse)		15.0	20.0	V
Junction Capacitance	C _J	V _R = 0V, f = 1MHz		0.2	0.3	pF

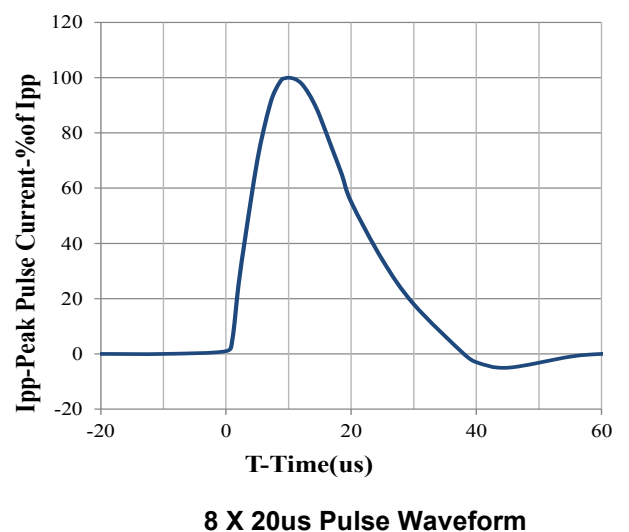
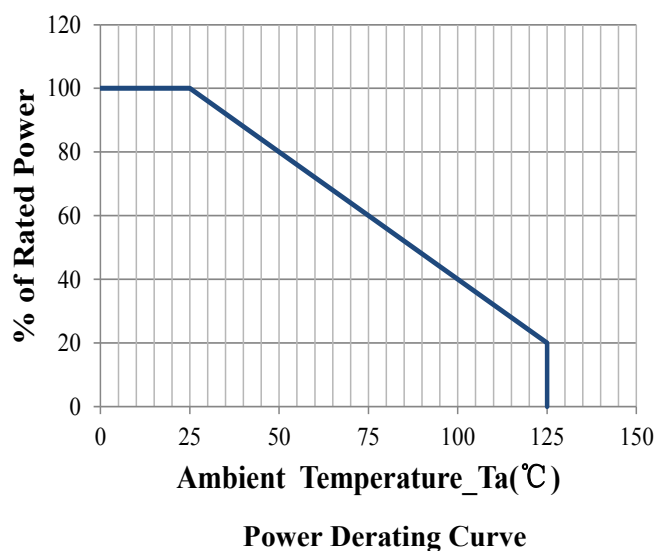
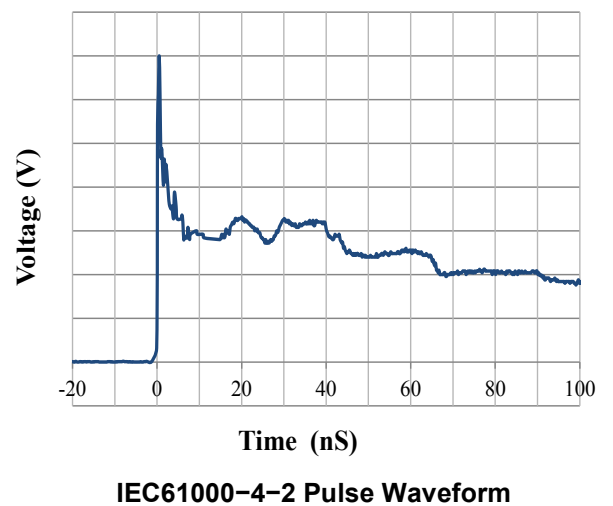
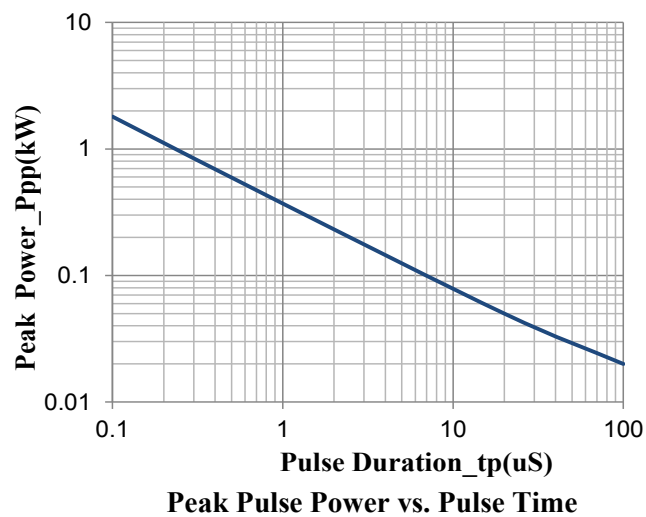
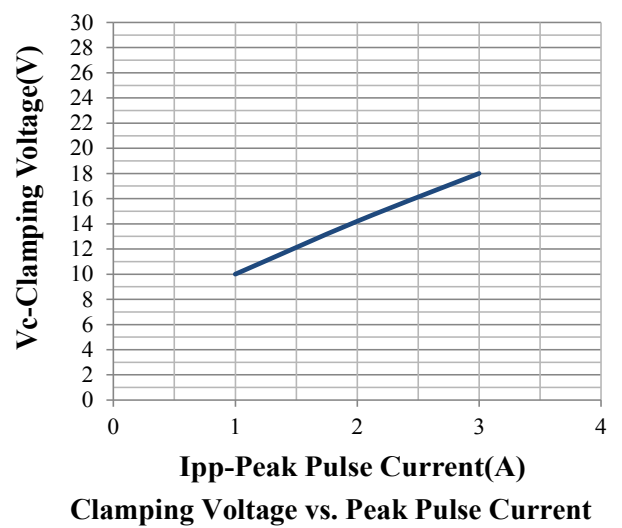
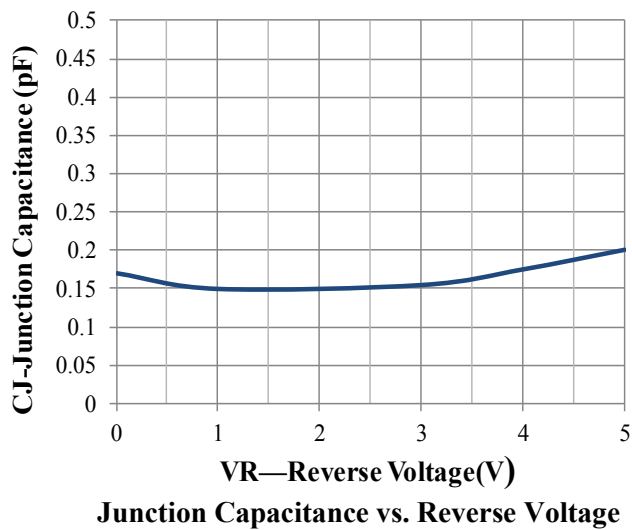
Electrical Parameters

Symbol	Parameter
I _T	Test Current
I _{PP}	Maximum Reverse Peak Pulse Current
V _C	Clamping Voltage @I _C



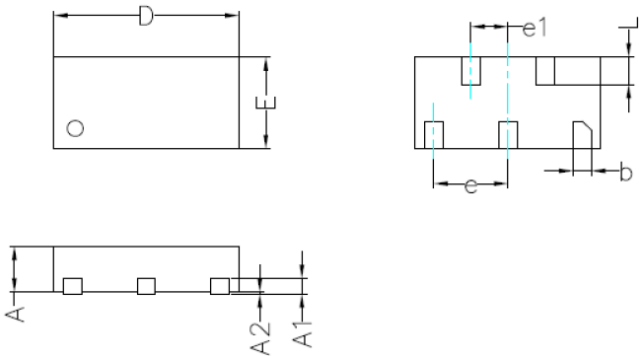


Typical Characteristics





DFN2010-5L Outline Drawing



Unit: mm

Package Dimensions			
Symbols	Min	Nom	Max
A	0.45	0.50	0.55
A1	0.15REF		
A2	0.00	0.02	0.05
D	1.55	2.00	1.65
E	0.95	1.00	1.05
L	0.25	0.30	0.35
b	0.15	0.20	0.25
e1	0.40BSC		
e	0.80BSC		