

FEATURES

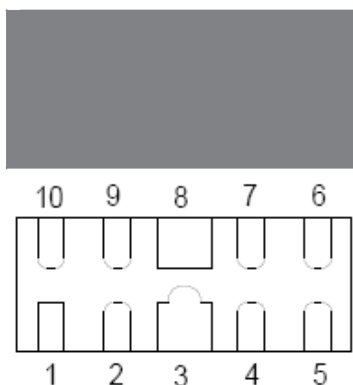
- Package design optimized for high speed lines
- Flow-Through design
- Protects four I/O lines
- Low capacitance: 0.3pF typical (I/O to I/O)
- Low clamping voltage
- Low operating voltage: 5V
- Moisture Sensitivity Level 1

APPLICATIONS

- High Definition Multi-Media Interface (HDMI)
- Digital Visual Interface (DVI)
- DisplayPort™ Interface
- MDDI Ports
- LVDS
- Serial ATA

DFN-10 PACKAGE

Marking code : 05V4



MECHANICAL DATA

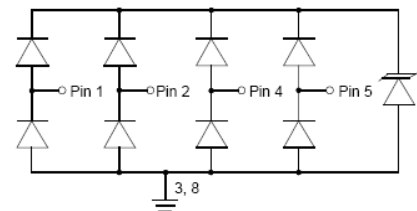
- Case : Molded plastic, DFN-10
- Polarity : Shown above
- Terminals : Plated terminals, solderable per MIL-STD-750, Method 2026
- Epoxy : UL94-V0 rated flame retardant

IEC COMPATIBILITY

- Level 4 15 kV (air discharge)
8 kV (contact discharge)
- MIL STD 883E - Method 3015-7 Class 3
25 kV HBM (Human Body Model)

SCHEMATIC & PIN CONFIGURATION

Pin	Identification
1、2、4、5	Input Lines
6、7、9、10	Output Lines (No Internal Connection)
3、8	Ground



General Description

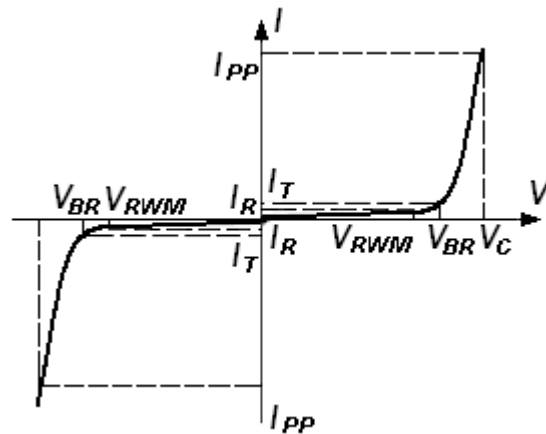
SEDFN05V4 are ultra low capacitance TVS arrays designed to protect high speed data interfaces. This series has been specifically designed to protect sensitive components which are connected to high-speed data and transmission lines from overvoltage caused by ESD (electrostatic discharge), CDE (Cable Discharge Events), and EFT (electrical fast transients)

Absolute Maximum Ratings

Symbol	Parameter	Value	Units
P _{pp}	Peak Pulse Power (t _p = 8/20μs)	150	Watts
I _{pp}	Peak Pulse Current (t _p = 8/20μs)	5	A
V _{ESD}	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	+/- 17 +/- 12	kV
T _J	Operating Temperature	-55 to +125	°C
T _{STG}	Storage Temperature	-55 to +150	°C

Electrical Parameter

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T

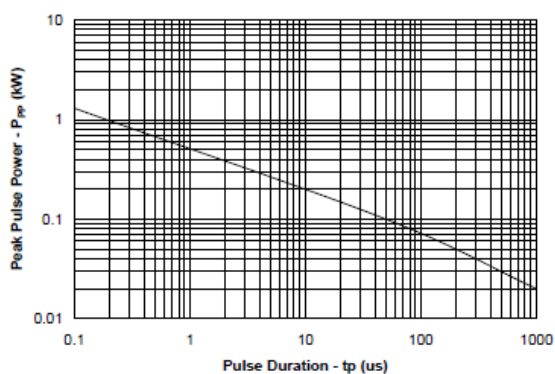


Electrical Characteristics (T_{amb}=25°C)

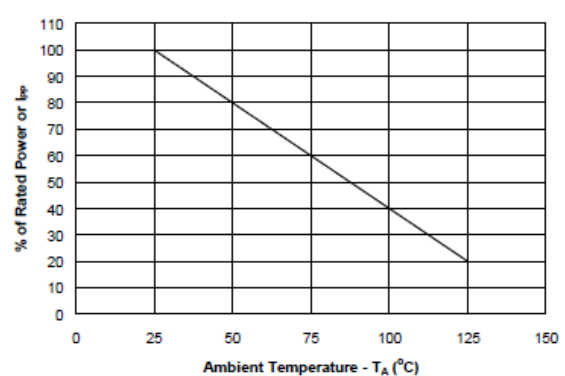
	V _{BR}	V _C	V _{RWM}	I _{RWM}	C Typ 0v bias
	Min.				
	V	V	V	μA	pF
SEDFN05V4	6	15	5	1	0.30

Typical Characteristics

Non-Repetitive Peak Pulse Power vs. Pulse Time

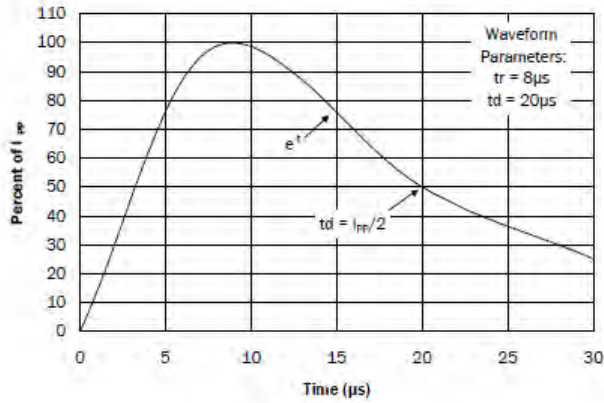


Power Derating Curve

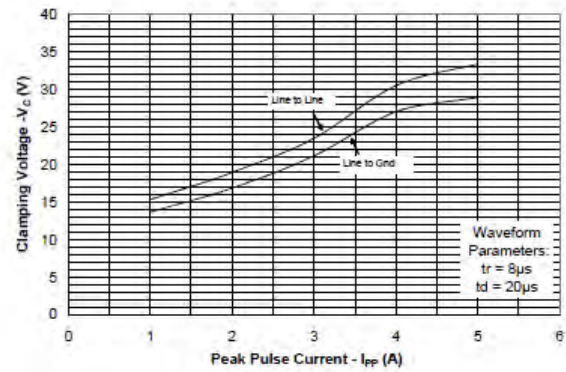




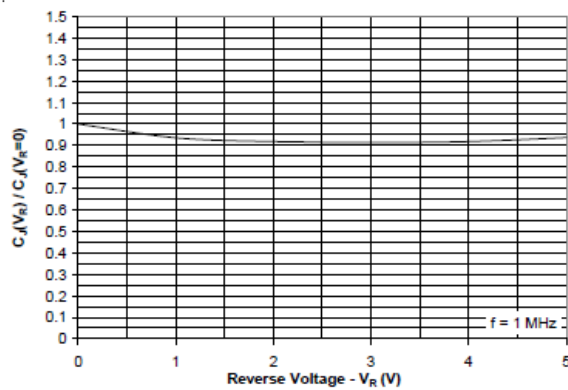
Pulse Waveform



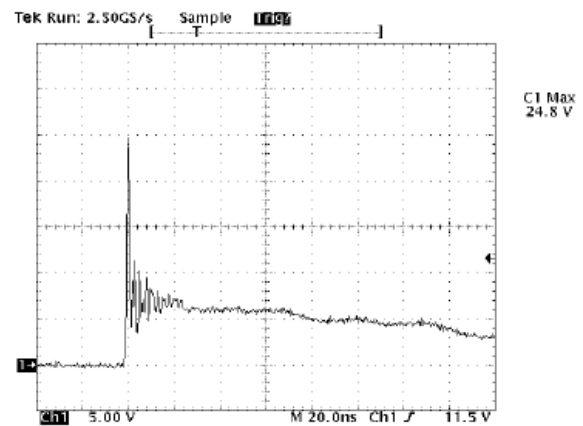
Clamping Voltage vs. Peak Pulse Current



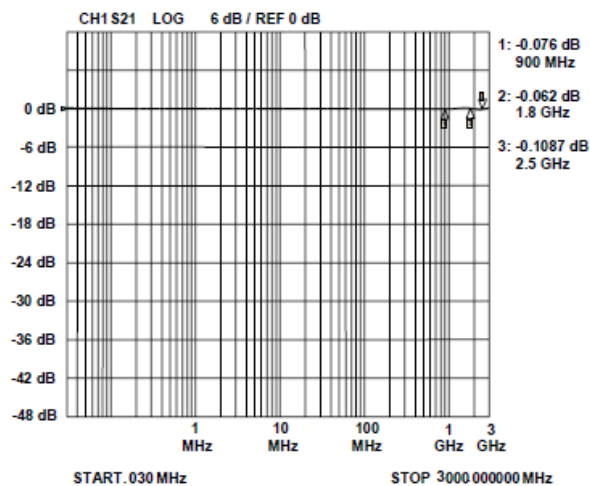
Normalized Capacitance vs. Reverse Voltage



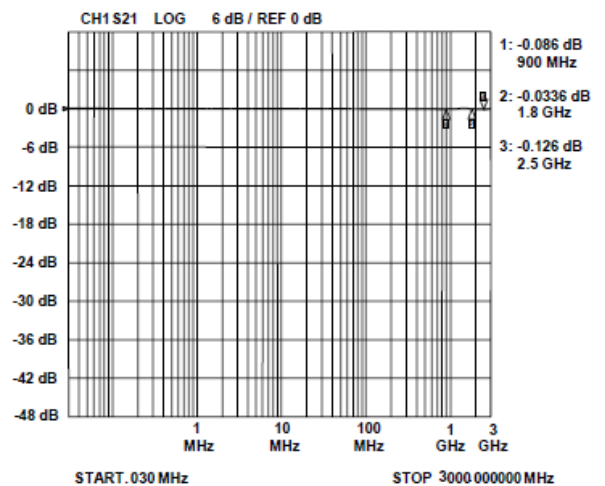
ESD Clamping for +8kV pulse per IEC 61000-4-2



Insertion Loss S21 - I/O to I/O

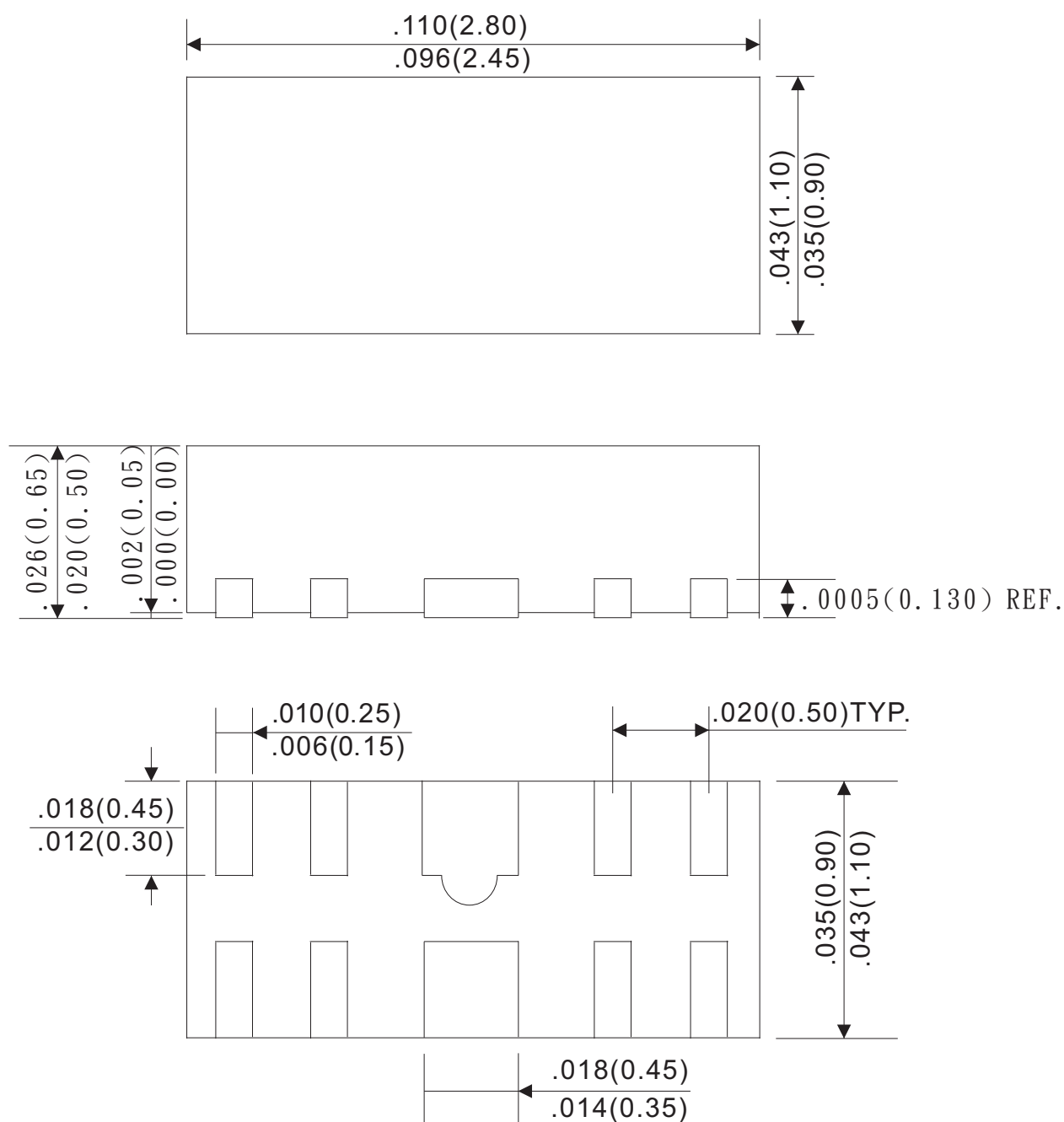


Insertion Loss S21 - I/O to GND



Outline Drawing

DFN-10



Dimensions in inches and (millimeters)

Rev.C

Ordering Information:

Device PN	Packing
PEDFN05V4 -T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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