Low Capacitance TVS Diode Array

FEATURES

Terminal Capacitance ESD Protection Environmentally Friendly

- : 0.8pF (Line-to-GND)
- : 8kV Contact (IEC61000-4-2)
- : EU RoHS Compliant, Pb Free

■ PRODUCT NAME

PRODUCT NAME	PACKAGE	ORDER UNIT
XBP14E5UFN-G *	DFN2510-10A	5,000pcs/Reel

* The "-G" suffix denotes Halogen and Antimony free as well as being fully EU RoHS compliant.

■ PIN CONFIGURATION



1.	I/O 1
2.	I/O 2
3.	GND
4.	I/O 3
5.	I/O 4
6.	NC
7.	NC
8.	GND
9.	NC
10.	NC

■ APPLICATIONS

- •USB 3.0
- •DVI
- Set Top Box

PACKAGING INFORMATION



■ABSOLUTE MAXIMUM RATINGS

			Ta=25°C
PARAMETER	SYMBOL	RATINGS	UNIT
Junction Temperature	Tj	125	°C
Storage Temperature	Tstg	-55 to +150	°C
IEC61000-4-2 (ESD) Air	V_{ESD_A}	±15	kV
IEC61000-4-2 (ESD) Contact	V_{ESD_C}	±8	kV

ETR29021-001

XBP14E5UFN-G

■ELECTRICAL CHARACTERISTICS

Ta=25℃

	SYMBOL	TEST CONDITIONS	LIMITS			
PARAMETER			MIN.	TYP.	MAX.	UNIT
Stand-Off Voltage	V _{RWM}		-	-	5	V
Breakdown Voltage	V _{BR}	I _R =1mA, I/O pin to Pin3	6	-	9	V
Leakage Current	I _R	V_R =5V, I/O pin to Pin3	-	-	1	μA
Clamping Voltage (8/20 µs)	Vc	IPP=2.5A, I/O pin to Pin3	-	11	13	V
Terminal Conscitutes	C _t	V _R =0V, f=1MHz Between I/O pin to Pin3	-	0.6	0.8	pF
Terminal Capacitance	Ct	V _R =0V, f=1MHz Between I/O pins	-	0.35	0.4	pF

■NOTES ON USE

1. Please use this IC within the absolute maximum ratings.

Even within the ratings, in case of high load use continuously such as high temperature, high voltage, high current and thermal stress may cause reliability degradation of the IC.

2. Torex places an importance on improving our products and their reliability.

We request that users incorporate fail-safe designs and post-aging protection treatment when using Torex products in their systems.

■TYPICAL PERFORMANCE CHARACTERISTICS

(1) Clamping Voltage vs. Peak Pulse Current



(3) Transmission Line Pulse (TLP) Measurement



(2) Reverse Current vs. Reverse Voltage



 $\mathsf{Reverse}\:\mathsf{Voltage};\mathsf{V_R}(\mathsf{V})$

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■REFERENCE PATTERN LAYOUT

•DFN2510-10A



■ MARKING



(12): Control Number

■TAPING SPECIFICATIONS

•DFN2510-10A

Unit : mm



 SYMBOL	mm
 D ₀	1.55 ± 0.05
D1	0.50 ± 0.05
E	1.75 ± 0.10
F	3.50 ± 0.05
P ₀	4.00 ± 0.10
P1	4.00 ± 0.10
P2	2.00 ± 0.05
W	8.00 + 0.30 - 0.15

XBP14E5UFN-G

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