ETR29008-002

## Low Capacitance TVS Diode

#### **■**FEATURES

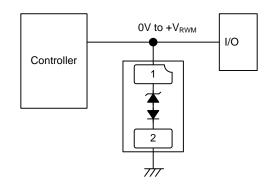
Uni-directional, One Line
Terminal Capacitance : 0.35pF
ESD Protection : 25kV

Environmentally Friendly : EU RoHS Compliant

## **■**APPLICATIONS

- ●USB2.0, Firewire
- ●HDMI Ver.1.3
- DVI

## **■PIN CONFIGURATION**



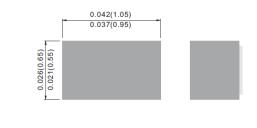
#### **■**PRODUCT NAME

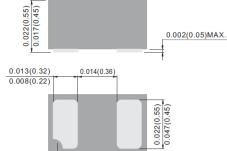
PRODUCT NAME	PACKAGE	ORDER UNIT
XBP1009-G *	DFN2L	8,000 / Reel

<sup>\*</sup> The "-G" suffix denotes Halogen and Antimony free as well as being fully RoHS compliant.

## ■ PACKAGING INFORMATION







PIN NO.1 IDENTIFICATION

## ■ABSOLUTE MAXIMUM RATINGS

Ta=25°C

PARAMETER	SYMBOL	RATINGS	UNITS	
Peak Pulse Power (8/20 μ s Waveform)	Ppk	200	W	
Peak Pulse Current (8/20 $\mu$ s Waveform)	Ipp	18	А	
Junction Temperature	Tj	-55 to 150	°C	
Storage Temperature	Tstg	-55 to 150	°C	

<sup>\*</sup> The high-melting solder paste (lead-containing) is used as attachment.

## ■ ELECTRICAL CHARACTERISTICS

Ta=25°C

PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNITS
			MIN.	TYP.	MAX.	UNITS
Stand-Off Voltage	$V_{RWM}$		-	-	5	V
Breakdown Voltage	$V_{BR}$	I <sub>R</sub> =1mA	6.0	7.4	-	V
Leakage Current	I <sub>R</sub>	V <sub>R</sub> =5V		-	1	μΑ
Clamping Voltage (8/20 μ s)	V <sub>C</sub>	I <sub>PP</sub> =5A	-	9.0	11	V
Clamping Voltage (8/20 μ s)	V <sub>C</sub>	I <sub>PP</sub> =15A	-	11.5	14	V
Terminal Capacitance	Ct	V <sub>R</sub> =0V, f=1MHz	-	0.28	0.35	pF

## ■NOTES ON USE

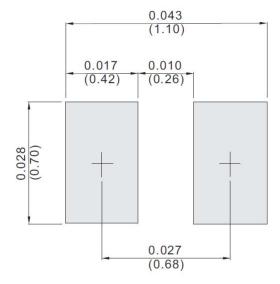
- Please use this IC within the absolute maximum ratings.
   Even within the ratings, in case of high load use continuously such as high temperature, high voltage, high current and thermal stress may cause reliability degradation of the IC.
- 2. Torex places an importance on improving our products and their reliability.

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

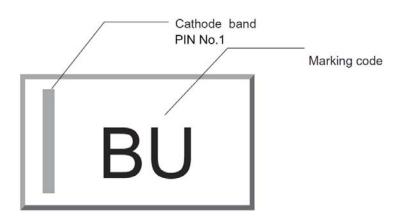
# ■REFERENCE PATTERN LAYOUT

●DFN2L

Unit: inch (mm)

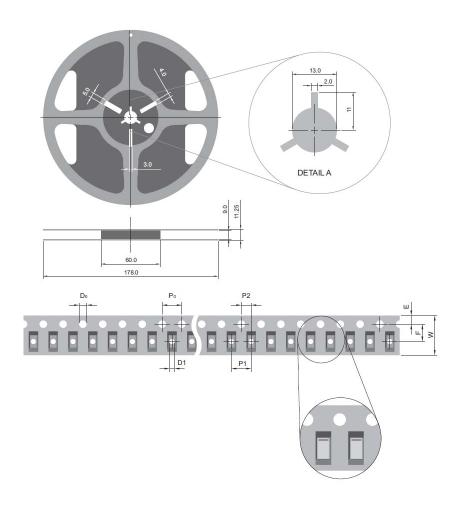


# **■**MARKING



# ■TAPING SPECIFICATIONS

## ●DFN2L



SYMBOL	mm	
D0	1.50 ± 0.10	
D1	$0.50 \pm 0.05$	
E	1.75 ± 0.10	
F	$3.50 \pm 0.05$	
P0	4.00 ± 0.10	
P1	2.00 ± 0.05	
P2	2.00 ± 0.05	
W	+ 0.3 8.00 - 0.1	

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