

## Low Capacitance TVS Diode

## ■ FEATURES

Uni-directional, One Line

Terminal Capacitance : 0.35pF

ESD Protection : 25kV

Environmentally Friendly : EU RoHS Compliant

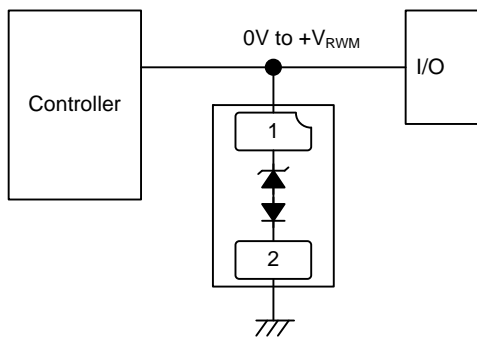
## ■ APPLICATIONS

● USB2.0, Firewire

● HDMI Ver.1.3

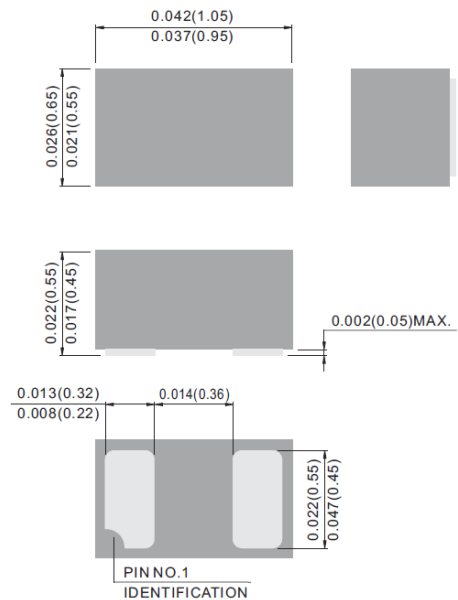
● DVI

## ■ PIN CONFIGURATION



## ■ PACKAGING INFORMATION

● DFN2L Unit: inch (mm)



## ■ PRODUCT NAME

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

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

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

## ■ ABSOLUTE MAXIMUM RATINGS

Ta=25°C

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

## ■ ELECTRICAL CHARACTERISTICS

Ta=25°C

PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNITS
			MIN.	TYP.	MAX.	
Stand-Off Voltage	$V_{RWM}$		-	-	5	V
Breakdown Voltage	$V_{BR}$	$I_R=1mA$	6.0	7.4	-	V
Leakage Current	$I_R$	$V_R=5V$	-	-	1	$\mu A$
Clamping Voltage (8/20 $\mu s$ )	$V_C$	$I_{PP}=5A$	-	9.0	11	V
Clamping Voltage (8/20 $\mu s$ )	$V_C$	$I_{PP}=15A$	-	11.5	14	V
Terminal Capacitance	$C_t$	$V_R=0V, f=1MHz$	-	0.28	0.35	pF

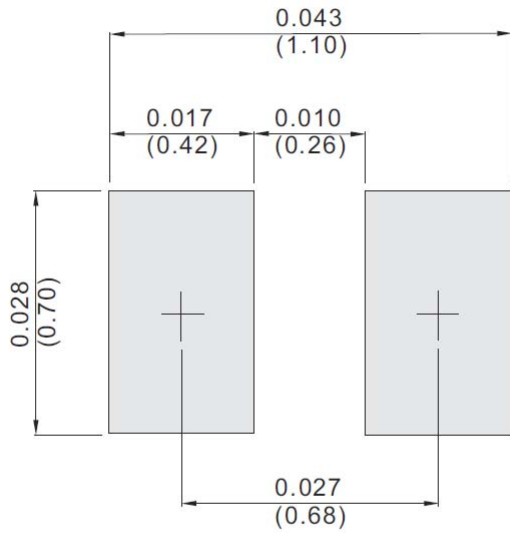
## ■ NOTES ON USE

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.

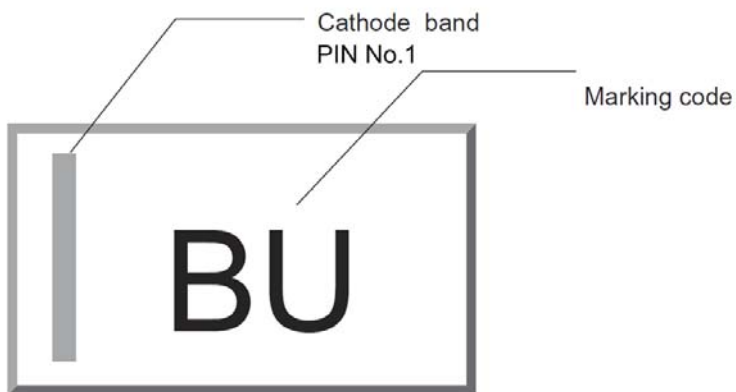
## ■ REFERENCE PATTERN LAYOUT

● DFN2L

Unit : inch (mm)

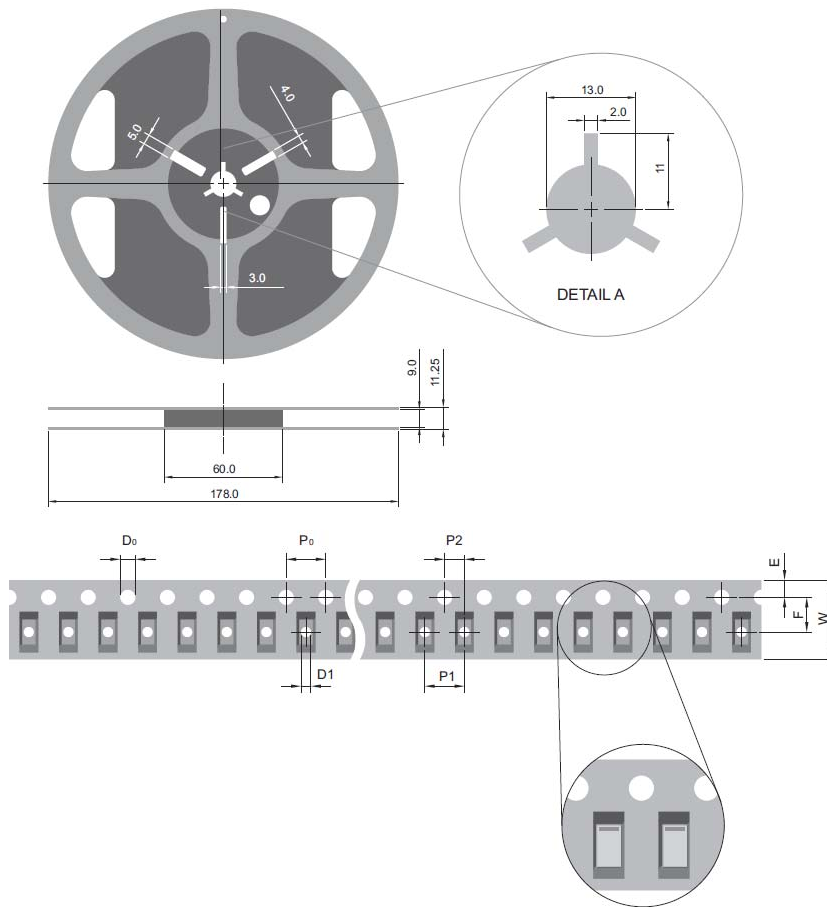


## ■ MARKING



## TAPING SPECIFICATIONS

●DFN2L



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

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