

# XBP1001

ETR29005-001a

## Low Capacitance TVS Diode Array

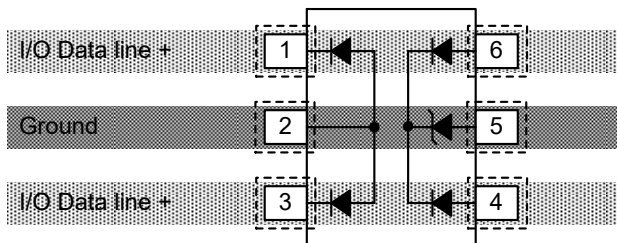
### FEATURES

- Terminal Capacitance** : 1.2pF (Line-to-GND)
- ESD Protection** : 8kV Contact (IEC61000-4-2)
- Environmentally Friendly** : EU RoHS Compliant, Pb Free

### APPLICATIONS

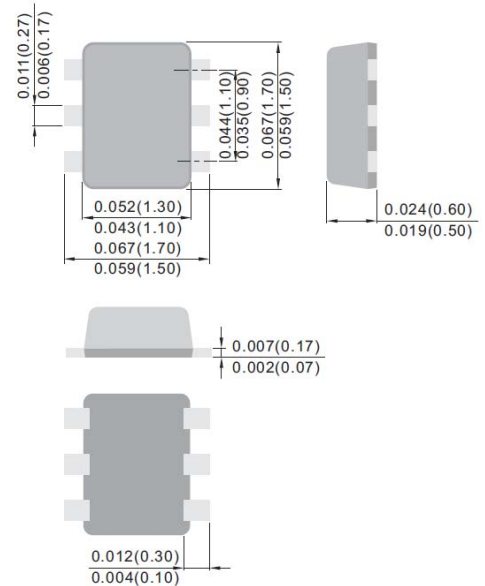
- USB2.0, Firewire
- HDMI Ver.1.3
- DVI

### PIN CONFIGURATION



### PACKAGING INFORMATION

- SOT-563 Unit : inch (mm)



### PRODUCT NAME

PRODUCT NAME	PACKAGE	ORDER UNIT
XBP1001-G *	SOT-563	4,000/Reel

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

### ABSOLUTE MAXIMUM RATINGS

Ta=25°C

PARAMETER	SYMBOL	RATINGS	UNITS
Peak Pulse Power (8/20 μs Waveform)	Ppk	75	W
Peak Pulse Current (8/20 μs Waveform)	Ipp	5	A
Junction Temperature	Tj	-55 to 125	°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 <sub>RWM</sub>		-	-	5	V
Breakdown Voltage	V <sub>BR</sub>	I <sub>R</sub> =1mA	6.2	-	-	V
Leakage Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	1.0	μA
Clamping Voltage (8/20 μs)	V <sub>C</sub>	I <sub>PP</sub> =1A	-	-	10	V
Clamping Voltage (8/20 μs)	V <sub>C</sub>	I <sub>PP</sub> =2A	-	-	12	V
Clamping Voltage (8/20 μs)	V <sub>C</sub>	I <sub>PP</sub> =5A	-	-	15	V
Terminal Capacitance	C <sub>t</sub>	V <sub>R</sub> =0V, f=1MHz Between I/O pins and GND pin	-	-	1.2	pF
		V <sub>R</sub> =0V, f=1MHz Between I/O pins	-	-	0.6	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.

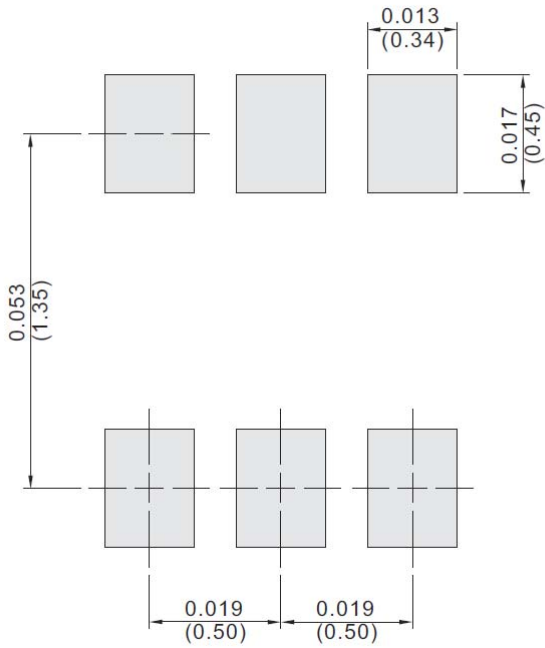
2. Torex places an importance on improving our products and their reliability.

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

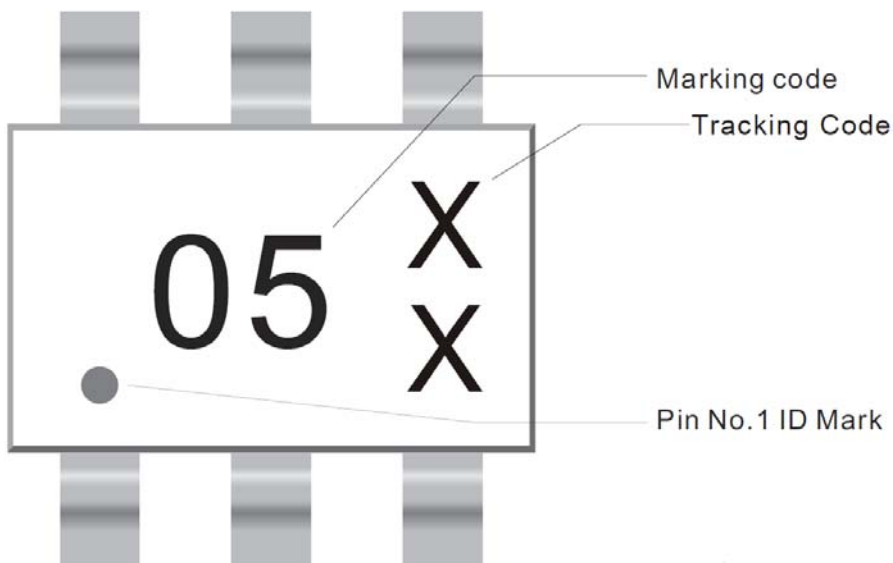
## REFERENCE PATTERN LAYOUT

●SOT-563

Unit : inch (mm)

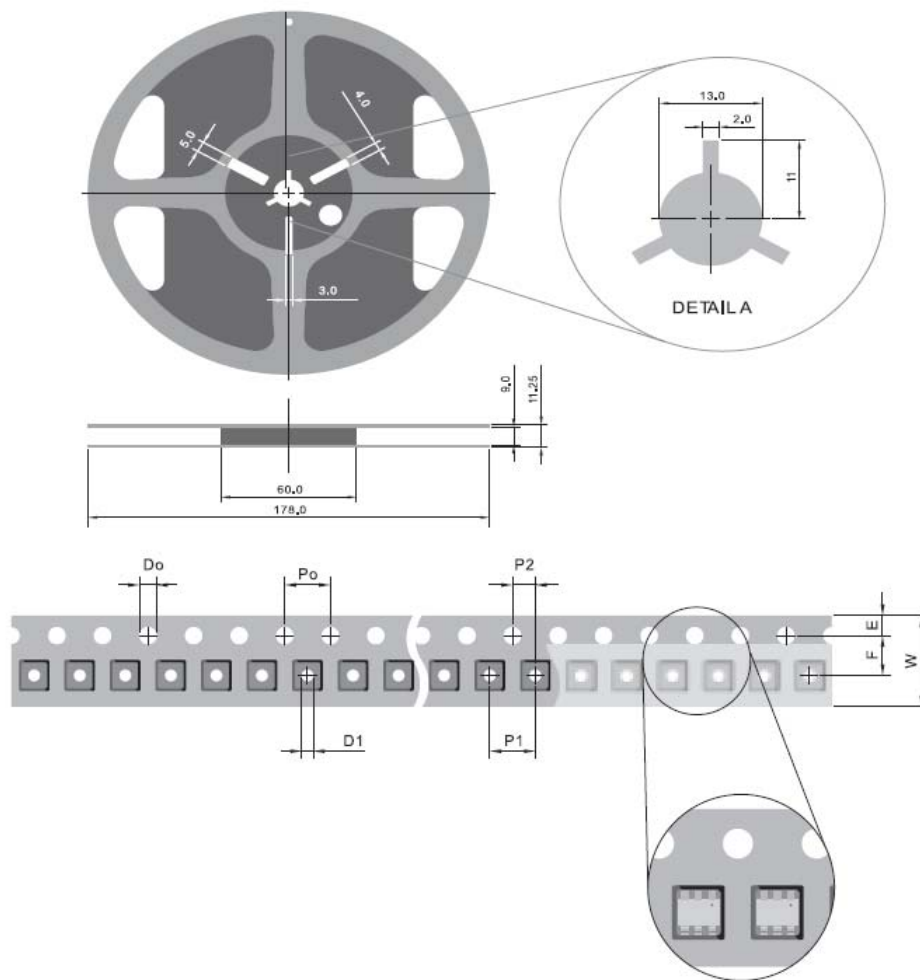


## MARKING



## TAPING SPECIFICATIONS

●SOT-563



SYMBOL	mm
D0	1.50 ± 0.10
D1	1.00 ± 0.25
E	1.75 ± 0.10
F	3.50 ± 0.05
P0	4.00 ± 0.10
P1	4.00 ± 0.10
P2	2.00 ± 0.05
W	8.00 <sup>+ 0.3</sup> <sub>-0.1</sub>

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