XBP1002 is Discontinued.

XBP1002

ETR29004-002

Low Capacitance TVS Diode Array

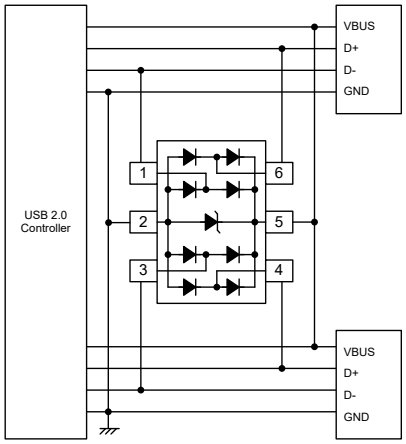
■FEATURES

Terminal Capacitance : 1.0pF (Line-to-GND)
ESD Protection : 8kV Contact (IEC61000-4-2)
Environmentally Friendly : EU RoHS Compliant, Pb Free

■APPLICATIONS

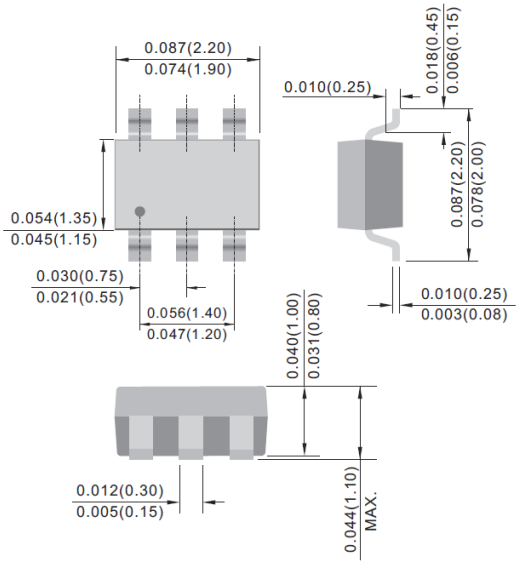
●USB2.0, Firewire
●Video Graphics Card
●DVI
●Ethernet 10/100/1000

■APPLICATION CIRCUIT



■ PACKAGING INFORMATION

●SOT-363 Unit: inch (mm)



■PRODUCT NAME

PRODUCT NAME	PACKAGE	ORDER UNIT
XBP1002-G *	SOT-363	3,000 / Reel

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

■ABSOLUTE MAXIMUM RATINGS

Ta=25℃

PARAMETER	SYMBOL	RATINGS	UNITS
Peak Pulse Power (8/20 μs Waveform)	Ppk	150	W
Peak Pulse Current (8/20 μs Waveform)	Ipp	6	A
Junction Temperature	Tj	-55 to 150	℃
Storage Temperature	Tstg	-55 to 150	℃

■ELECTRICAL CHARACTERISTICS

Ta=25℃

PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNITS
			MIN.	TYP.	MAX.	
Stand-Off Voltage	V_{RWM}		-	-	5	V
Breakdown Voltage	V_{BR}	I_R=1mA, Pin5 to 2	6	-	-	V
Leakage Current	I_R	V_R=5V, Pin5 to 2	-	1	3	μA
Clamping Voltage (8/20 μs)	V_C	I_{PP}=1A, I/O pin to Pin2	-	-	15	V
Clamping Voltage (8/20 μs)	V_C	I_{PP}=6A, I/O pin to Pin2	-	-	25	V
Terminal Capacitance	C_t	V_R=0V, f=1MHz Between I/O lines and GND	-	-	1	pF
		V_R=0V, f=1MHz Between I/O lines	-	-	0.5	pF

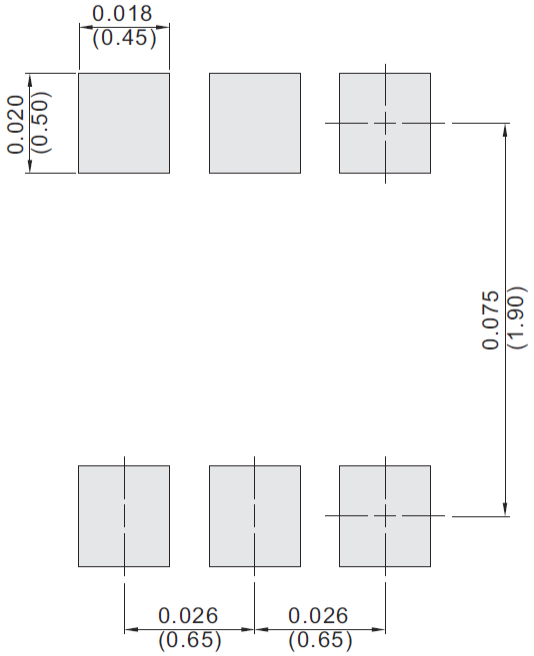
■NOTES ON USE

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.

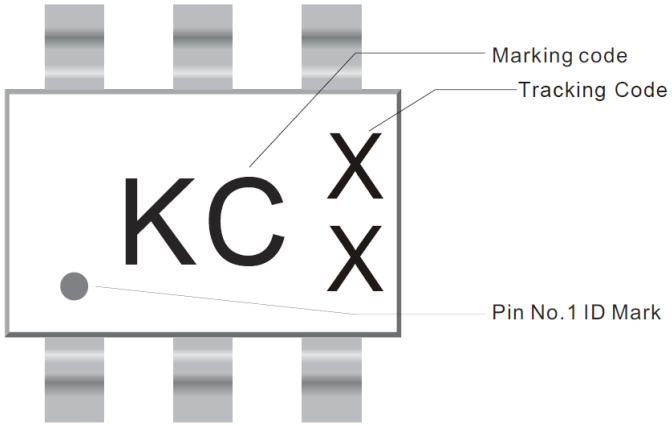
2. Torex places an importance on improving our products and their reliability.
   We request that users incorporate fail-safe designs and post-aging protection treatment when using Torex products in their systems.

■REFERENCE PATTERN LAYOUT

●SOT-363

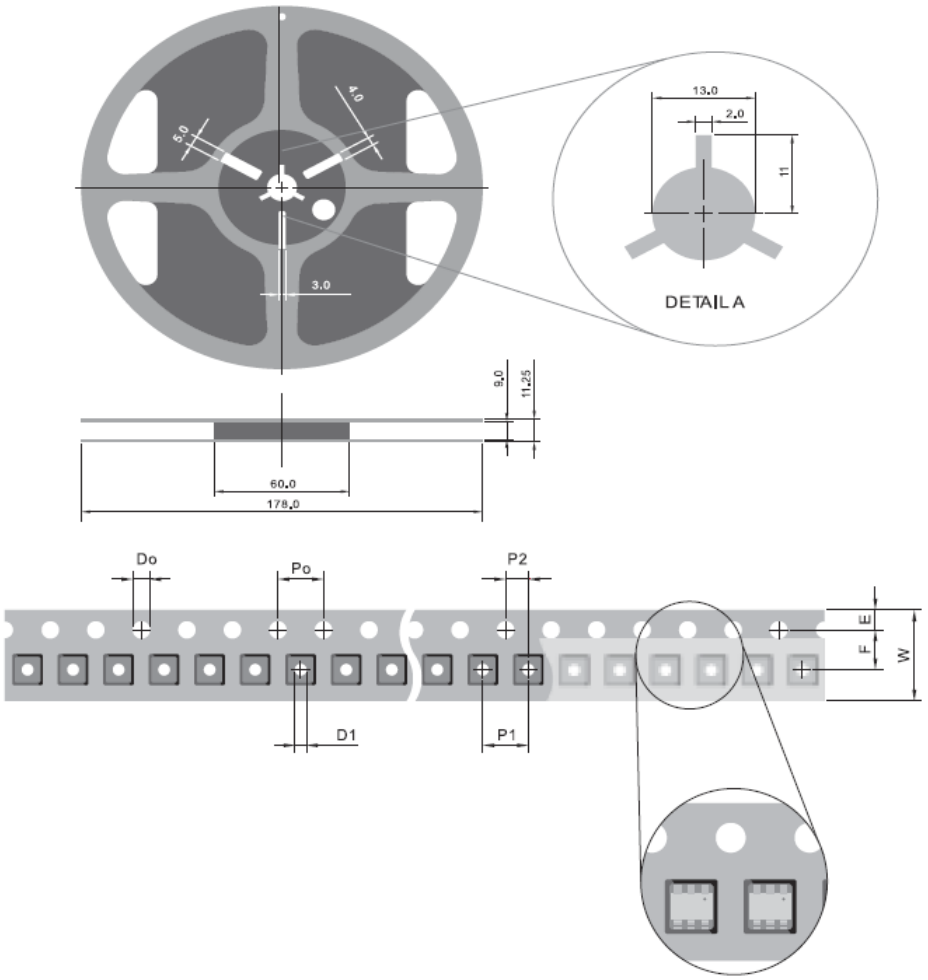


■MARKING



■TAPING SPECIFICATIONS

●SOT-363



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 +0.3 -0.1

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2. We assume no responsibility for any infringement of patents, patent rights, or other rights arising from the use of any information and circuitry in this datasheet.
3. Please ensure suitable shipping controls (including fail-safe designs and aging protection) are in force for equipment employing products listed in this datasheet.
4. The products in this datasheet are not developed, designed, or approved for use with such equipment whose failure of malfunction can be reasonably expected to directly endanger the life of, or cause significant injury to, the user.
   (e.g. Atomic energy; aerospace; transport; combustion and associated safety equipment thereof.)
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