ETR29008-002

Low Capacitance TVS Diode

■FEATURES

Uni-directional, One Line Terminal Capacitance ESD Protection

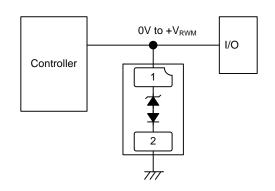
: 0.35pF : 25kV

Environmentally Friendly : EU RoHS Compliant

■APPLICATIONS

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

■PIN CONFIGURATION

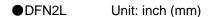


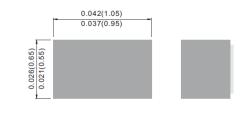
■PRODUCT NAME

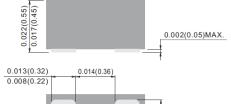
| PRODUCT NAME | PACKAGE | ORDER UNIT |
|--------------|---------|--------------|
| XBP1009-G * | DFN2L | 8,000 / Reel |

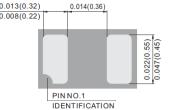
^{*} The "-G" suffix denotes Halogen and Antimony free as well as being fully RoHS compliant.

■ PACKAGING INFORMATION









■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 μ s Waveform) | Ipp | 18 | А |
| Junction Temperature | Tj | -55 to 150 | °C |
| Storage Temperature | Tstg | -55 to 150 | °C |

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

XBP1009

■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 _R =1mA | 6.0 | 7.4 | - | V |
| Leakage Current | I _R | V _R =5V | | | 1 | μΑ |
| Clamping Voltage (8/20 μ s) | V _C | I _{PP} =5A | - | 9.0 | 11 | V |
| Clamping Voltage (8/20 μ s) | V _C | I _{PP} =15A | - | 11.5 | 14 | V |
| Terminal Capacitance | Ct | V _R =0V, f=1MHz | - | 0.28 | 0.35 | pF |

■NOTES ON USE

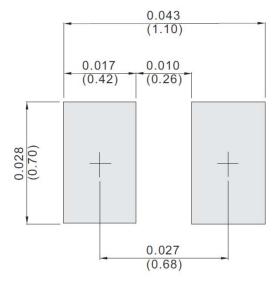
- Please use this IC within the absolute maximum ratings.
 Even within the ratings, in case of high load use continuously such as high temperature, high voltage, high current and thermal stress may cause reliability degradation of the IC.
- 2. Torex places an importance on improving our products and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

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

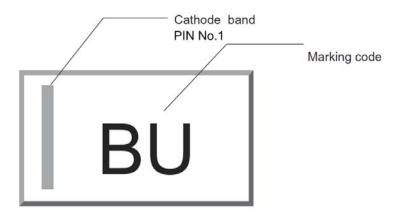
■ REFERENCE PATTERN LAYOUT

●DFN2L

Unit: inch (mm)



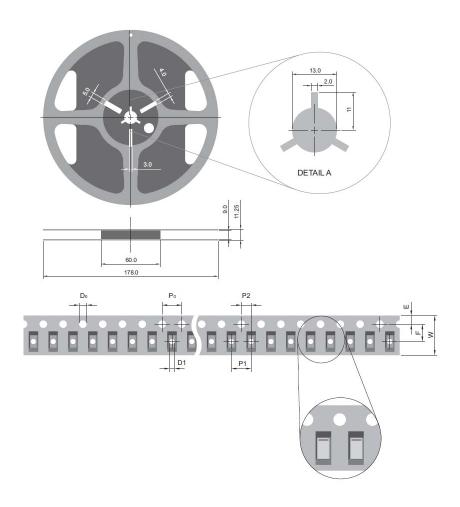
■MARKING



XBP1009

■TAPING SPECIFICATIONS

●DFN2L



| SYMBOL | mm | |
|--------|------------------------|--|
| D0 | 1.50 ± 0.10 | |
| D1 | 0.50 ± 0.05 | |
| E | 1.75 ± 0.10 | |
| F | 3.50 ± 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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 (e.g. Atomic, energy: aerospace: transport: combustion, and associated safety.
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