

## TVS Diode

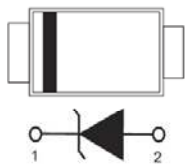
## ■ FEATURES

|                          |                              |
|--------------------------|------------------------------|
| Terminal Capacitance     | : 300pF                      |
| ESD Protection           | : 25kV                       |
| Environmentally Friendly | : EU RoHS Compliant, Pb Free |

## ■ APPLICATIONS

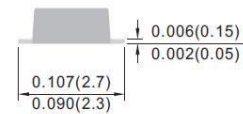
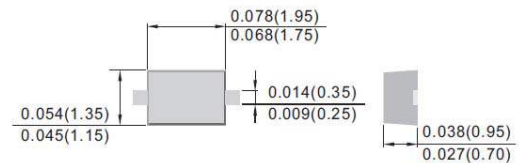
- Portable equipment

## ■ PIN CONFIGURATION



## ■ PACKAGING INFORMATION

- SOD-323P Unit: inch (mm)



## ■ PRODUCT NAME

| PRODUCT NAME | PACKAGE  | ORDER UNIT   |
|--------------|----------|--------------|
| XBP1013-G *  | SOD-323P | 5,000 / Reel |

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

## ■ ABSOLUTE MAXIMUM RATINGS

T<sub>a</sub>=25°C

| PARAMETER                           | SYMBOL           | RATINGS    | UNITS |
|-------------------------------------|------------------|------------|-------|
| Peak Pulse Power (8/20 μs Waveform) | P <sub>pk</sub>  | 350        | W     |
| Junction Temperature                | T <sub>j</sub>   | -50 to 150 | °C    |
| Storage Temperature                 | T <sub>stg</sub> | -50 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    | -    | 7.2  | V       |
| Leakage Current                  | $I_R$     | $V_R=5V$         | -      | -    | 10   | $\mu A$ |
| Clamping Voltage (8/20 $\mu s$ ) | $V_C$     | $I_{PP}=1A$      | -      | -    | 9.8  | V       |
| Terminal Capacitance             | $C_t$     | $V_R=0V, f=1MHz$ | -      | 300  | -    | pF      |
|                                  |           | $V_R=5V, f=1MHz$ | -      | 100  | -    | pF      |

## ■ NOTES ON USE

1. Please use this IC within the absolute maximum ratings.

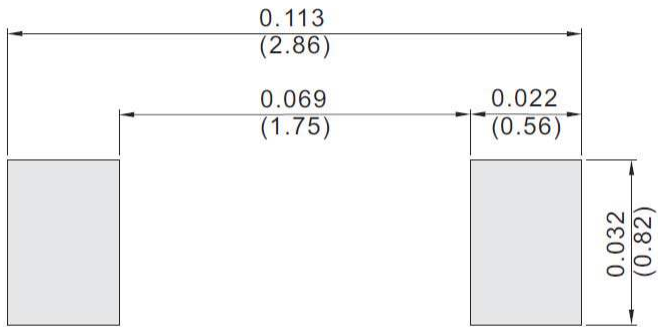
Even within the ratings, in case of high load use continuously such as high temperature, high voltage, high current and thermal stress may cause reliability degradation of the IC.

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

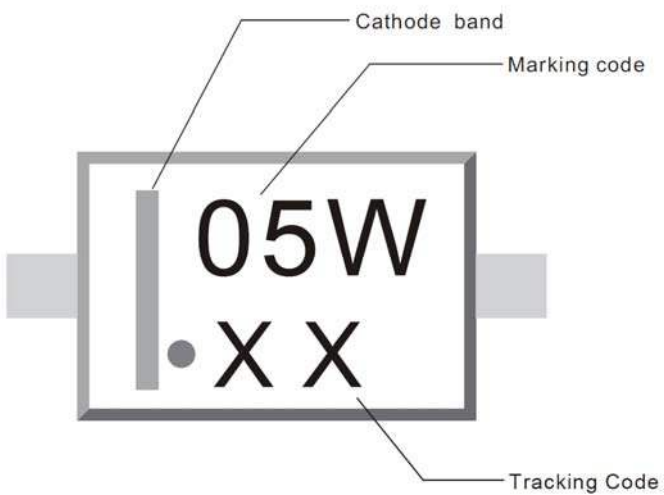
We request that users incorporate fail-safe designs and post-aging protection treatment when using Torex products in their systems.

## ■ REFERENCE PATTERN LAYOUT

● SOD-323P



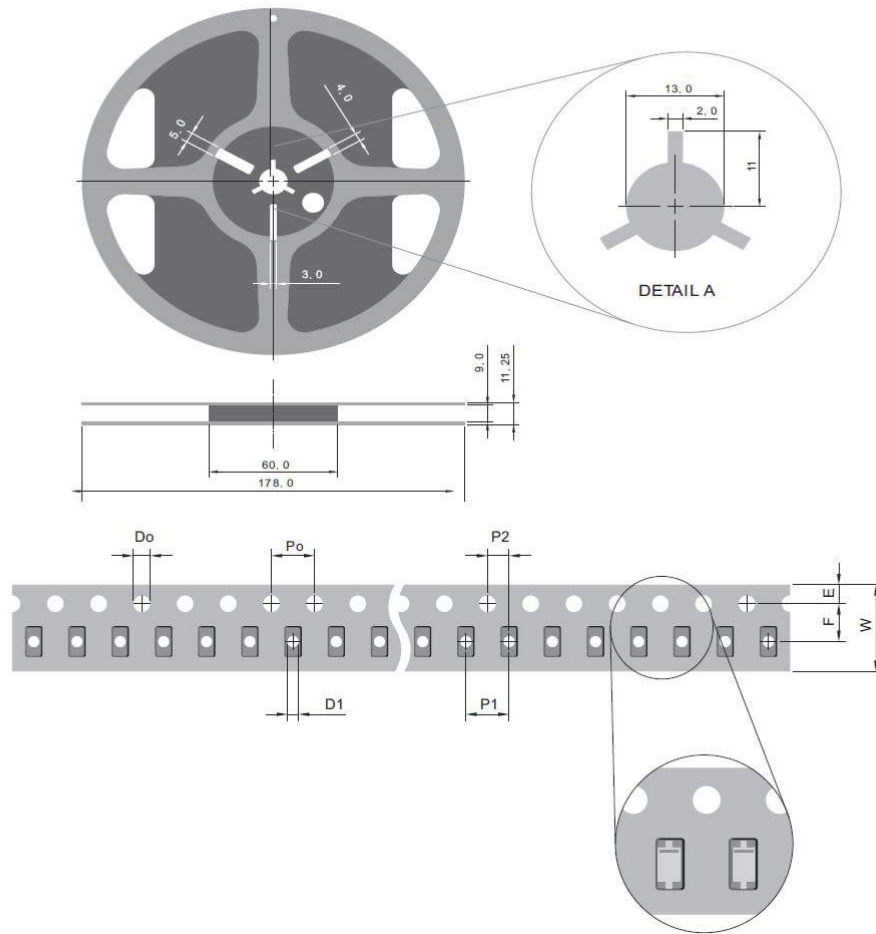
## ■ MARKING



# XBP1013

## TAPING SPECIFICATIONS

●SOD-323P



| SYMBOL | mm                   |
|--------|----------------------|
| D0     | 1.55 ± 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 + 0.30<br>-0.15 |

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