

XBP14E5UFN-G

ETR29021-001

Low Capacitance TVS Diode Array

FEATURES

| | |
|---------------------------------|------------------------------|
| Terminal Capacitance | : 0.8pF (Line-to-GND) |
| ESD Protection | : 8kV Contact (IEC61000-4-2) |
| Environmentally Friendly | : EU RoHS Compliant, Pb Free |

APPLICATIONS

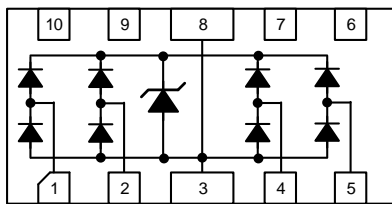
- USB 3.0
- DVI
- Set Top Box

PRODUCT NAME

| PRODUCT NAME | PACKAGE | ORDER UNIT |
|----------------|-------------|---------------|
| XBP14E5UFN-G * | DFN2510-10A | 5,000pcs/Reel |

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

PIN CONFIGURATION

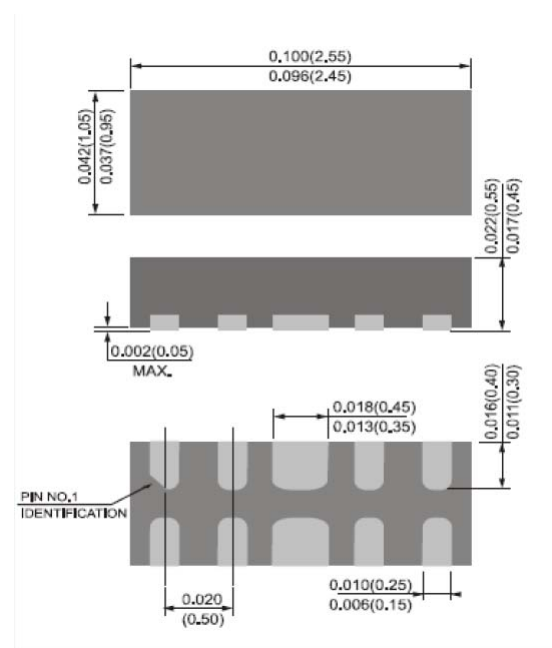


1. I/O 1
2. I/O 2
3. GND
4. I/O 3
5. I/O 4
6. NC
7. NC
8. GND
9. NC
10. NC

PACKAGING INFORMATION

● DFN2510-10A

Unit : inch (mm)



ABSOLUTE MAXIMUM RATINGS

Ta=25°C

| PARAMETER | SYMBOL | RATINGS | UNIT |
|----------------------------|--------------------|-------------|------|
| Junction Temperature | T _j | 125 | °C |
| Storage Temperature | T _{stg} | -55 to +150 | °C |
| IEC61000-4-2 (ESD) Air | V _{ESD_A} | ±15 | kV |
| IEC61000-4-2 (ESD) Contact | V _{ESD_C} | ±8 | kV |

ELECTRICAL CHARACTERISTICS

Ta=25°C

| PARAMETER | SYMBOL | TEST CONDITIONS | LIMITS | | | UNIT |
|----------------------------|------------------|---|--------|------|------|------|
| | | | MIN. | TYP. | MAX. | |
| Stand-Off Voltage | V _{RWM} | | - | - | 5 | V |
| Breakdown Voltage | V _{BR} | I _R =1mA, I/O pin to Pin3 | 6 | - | 9 | V |
| Leakage Current | I _R | V _R =5V, I/O pin to Pin3 | - | - | 1 | μA |
| Clamping Voltage (8/20 μs) | V _C | I _{PP} =2.5A, I/O pin to Pin3 | - | 11 | 13 | V |
| Terminal Capacitance | C _t | V _R =0V, f=1MHz Between I/O pin to Pin3 | - | 0.6 | 0.8 | pF |
| | C _t | V _R =0V, f=1MHz Between I/O pins | - | 0.35 | 0.4 | pF |

NOTES ON USE

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

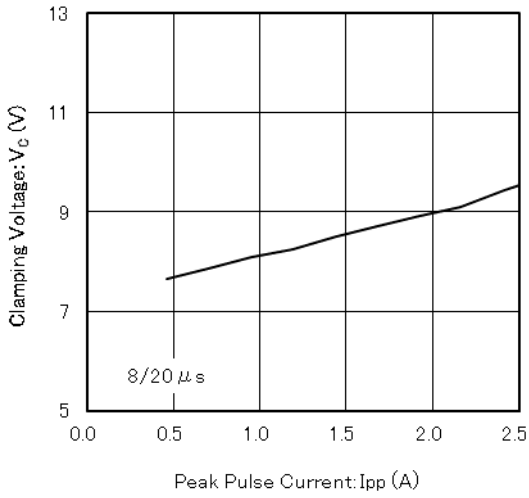
Even within the ratings, in case of high load use continuously such as high temperature, high voltage, high current and thermal stress may cause reliability degradation of the IC.

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

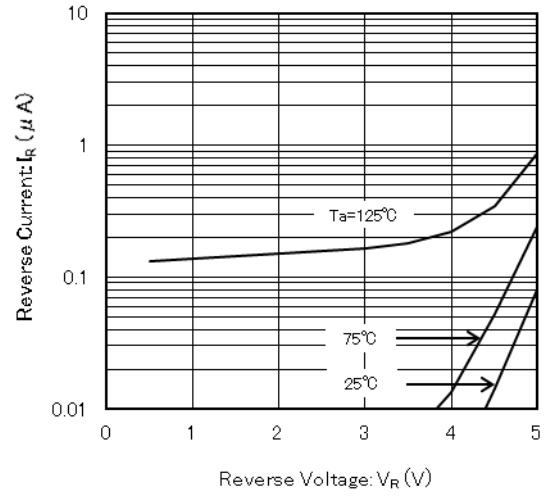
We request that users incorporate fail-safe designs and post-aging protection treatment when using Torex products in their systems.

TYPICAL PERFORMANCE CHARACTERISTICS

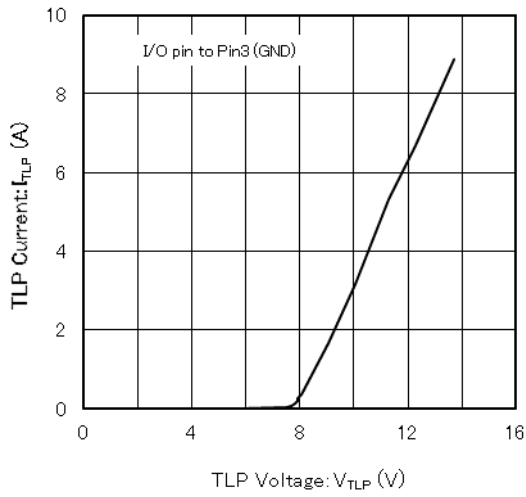
(1) Clamping Voltage vs. Peak Pulse Current



(2) Reverse Current vs. Reverse Voltage



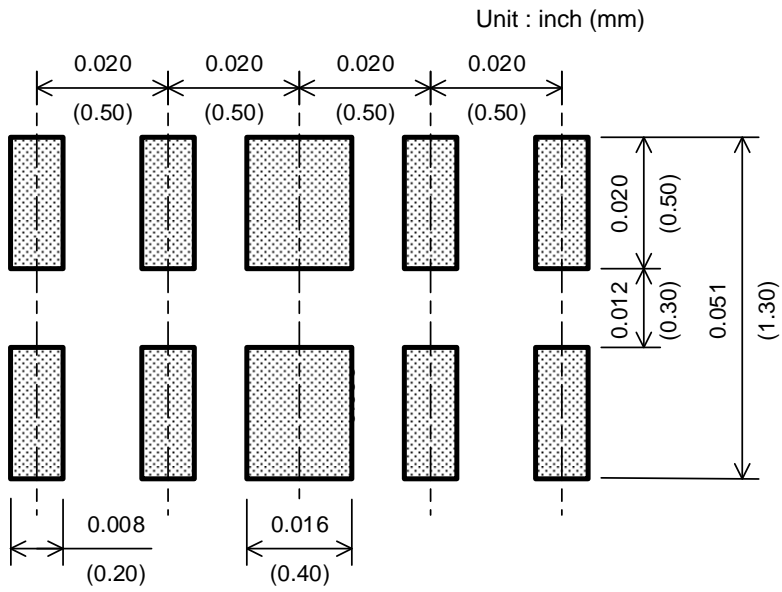
(3) Transmission Line Pulse (TLP) Measurement



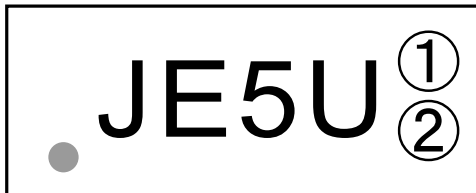
XBP14E5UFN-G

REFERENCE PATTERN LAYOUT

●DFN2510-10A



MARKING

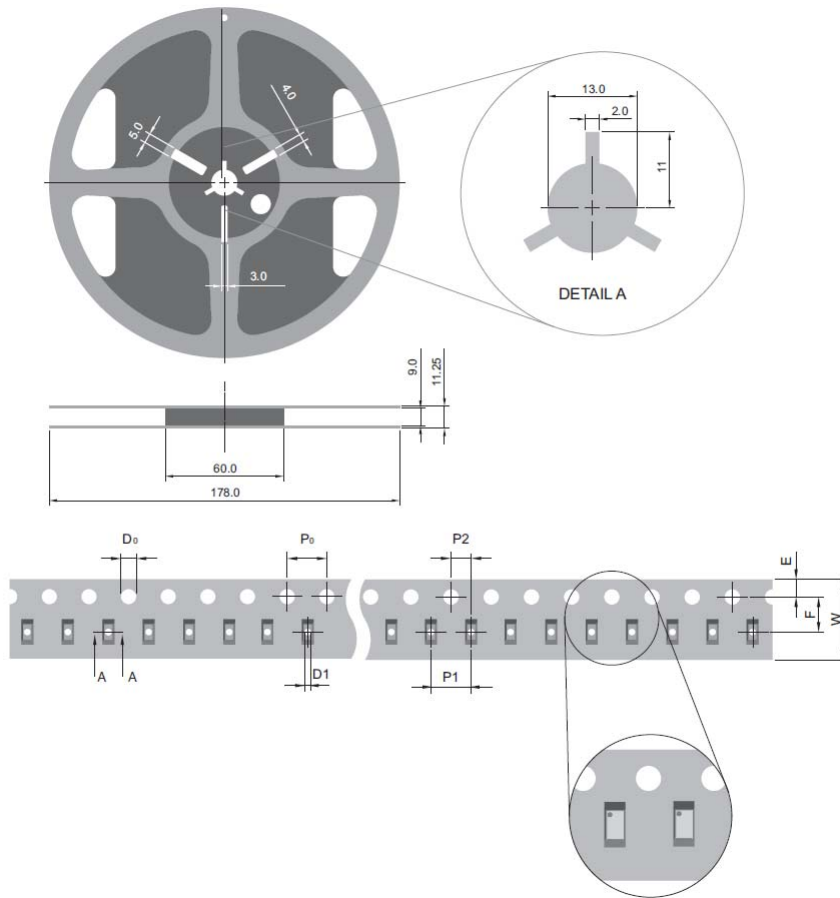


①② : Control Number

TAPING SPECIFICATIONS

●DFN2510-10A

Unit : mm



| SYMBOL | mm |
|----------------|-----------------------|
| D ₀ | 1.55 ± 0.05 |
| D ₁ | 0.50 ± 0.05 |
| E | 1.75 ± 0.10 |
| F | 3.50 ± 0.05 |
| P ₀ | 4.00 ± 0.10 |
| P ₁ | 4.00 ± 0.10 |
| P ₂ | 2.00 ± 0.05 |
| W | 8.00 + 0.30 - 0.15 |

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- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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