

# XBP15SRV05W-G

ETR29020-001

## Low Capacitance TVS Diode Array

### FEATURES

<b>Terminal Capacitance</b>	: 1.2pF (Line-to-GND)
<b>ESD Protection</b>	: 10kV Contact (IEC61000-4-2)
<b>Environmentally Friendly</b>	: EU RoHS Compliant, Pb Free

### APPLICATIONS

- USB 2.0, Firewire
- Video Graphics Card
- DVI
- Ethernet 10/100/1000

### PRODUCT NAME

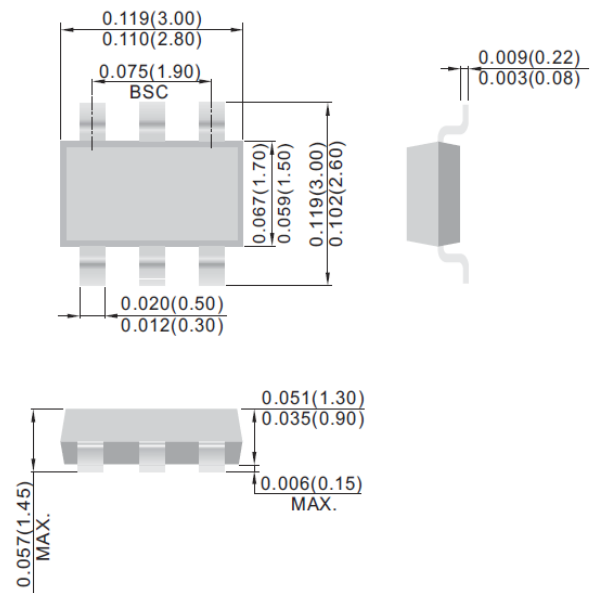
PRODUCT NAME	PACKAGE	ORDER UNIT
XBP15SRV05W-G *	SOT-26P	3,000pcs/Reel

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

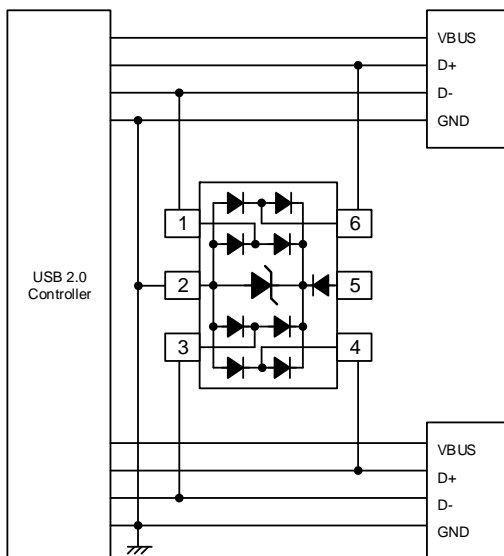
### PACKAGING INFORMATION

#### ● SOT-26P

Unit : inch (mm)



### APPLICATION CIRCUIT



### ABSOLUTE MAXIMUM RATINGS

Ta=25°C

PARAMETER	SYMBOL	RATINGS	UNIT
VDD Pin (Pin 5) Voltage	V <sub>DD</sub>	-0.3 ~ +6.0	V
I/O Pin (Pin 1,3,4,6) Voltage	V <sub>I/O</sub>	-0.3 ~ V <sub>DD</sub> +0.3	V
Junction Temperature	T <sub>j</sub>	125	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C
IEC61000-4-2 (ESD) Air	V <sub>ESD_A</sub>	±15	kV
IEC61000-4-2 (ESD) Contact	V <sub>ESD_C</sub>	±10	kV

Each voltage rating is based on Pin2 (GND) voltage.

## ELECTRICAL CHARACTERISTICS

Ta=25°C

PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Stand-Off Voltage	$V_{RWM}$		-	-	5	V
Breakdown Voltage	$V_{BR}$	$I_R=1\text{mA}$ , Pin5 to Pin2	6	-	-	V
Leakage Current	$I_R$	$V_R=5\text{V}$ , Pin5 to Pin2	-	-	5	$\mu\text{A}$
Clamping Voltage (8/20 $\mu\text{s}$ )	$V_C$	$I_{PP}=3\text{A}$ , I/O pin to Pin2	-	-	10	V
Terminal Capacitance	$C_t$	$V_R=0\text{V}$ , $f=1\text{MHz}$ Between I/O pin to Pin2	-	1.0	1.2	pF
	$C_t$	$V_R=0\text{V}$ , $f=1\text{MHz}$ Between I/O pins	-	0.5	0.6	pF

## NOTES ON USE

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

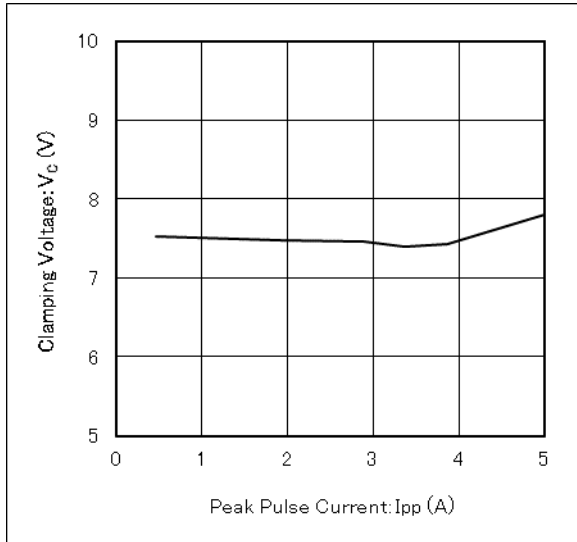
Even within the ratings, in case of high load use continuously such as high temperature, high voltage, high current and thermal stress may cause reliability degradation of the IC.

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

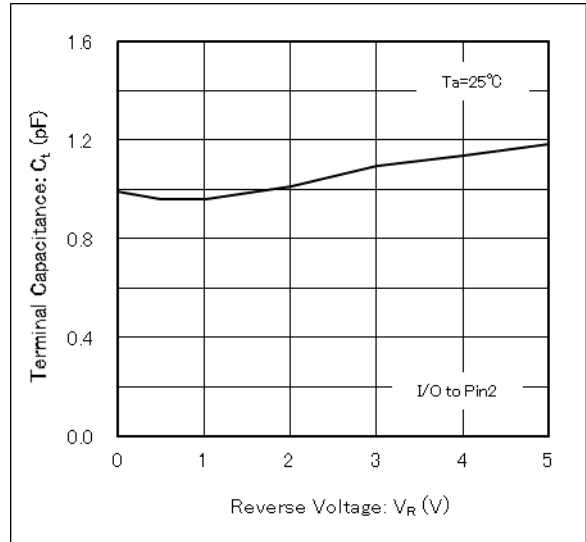
We request that users incorporate fail-safe designs and post-aging protection treatment when using Torex products in their systems.

## TYPICAL PERFORMANCE CHARACTERISTICS

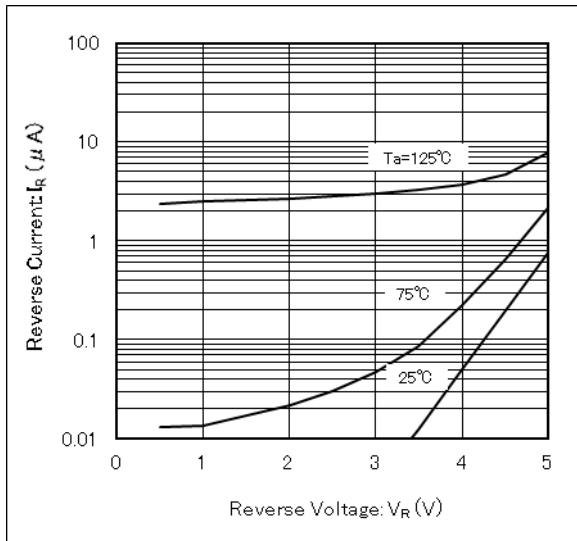
(1) Clamping Voltage vs. Peak Pulse Current



(2) Terminal Capacitance vs. Reverse Voltage (I/O to Pin2)



(3) Reverse Current vs. Reverse Voltage

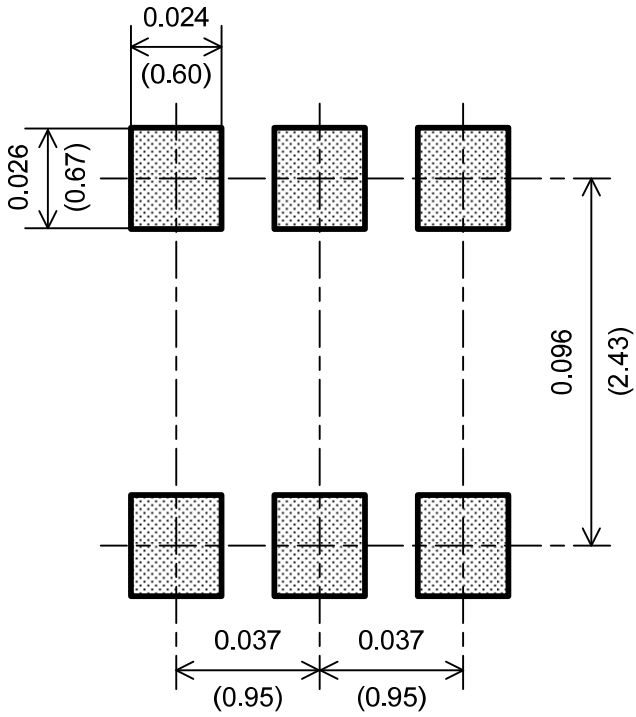


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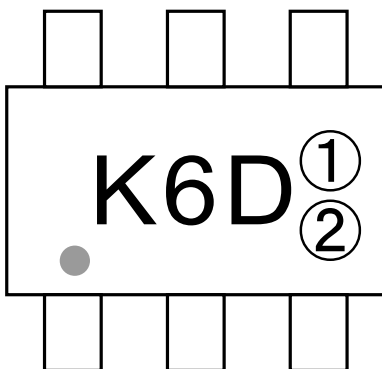
## REFERENCE PATTERN LAYOUT

● SOT-26P

Unit : inch (mm)



## MARKING

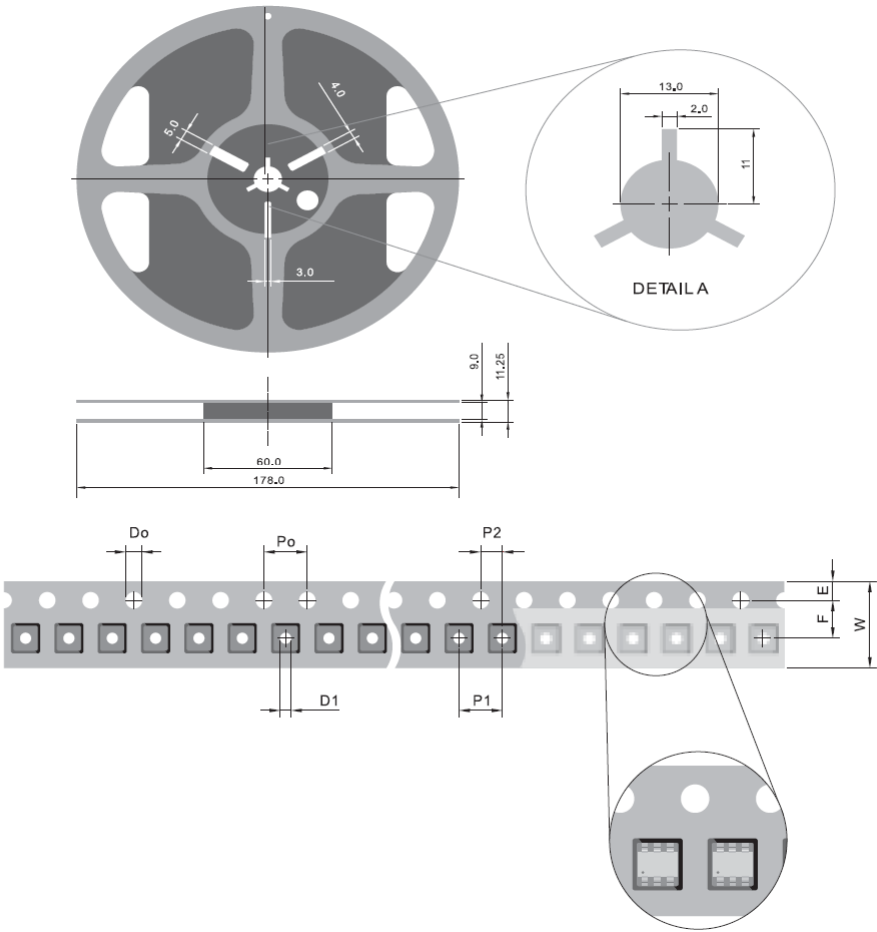


①② : Control Number

# TAPING SPECIFICATIONS

●SOT-26P

Unit : mm



SYMBOL	mm
D <sub>0</sub>	1.55 ± 0.05
D <sub>1</sub>	1.00 + 0.25 - 0.10
E	1.75 ± 0.10
F	3.50 ± 0.05
P <sub>0</sub>	4.00 ± 0.10
P <sub>1</sub>	4.00 ± 0.10
P <sub>2</sub>	2.00 ± 0.05
W	8.00 + 0.30 - 0.15

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