

# XBP15SRV05W-G

Low Capacitance TVS Diode Array

ETR29020-003

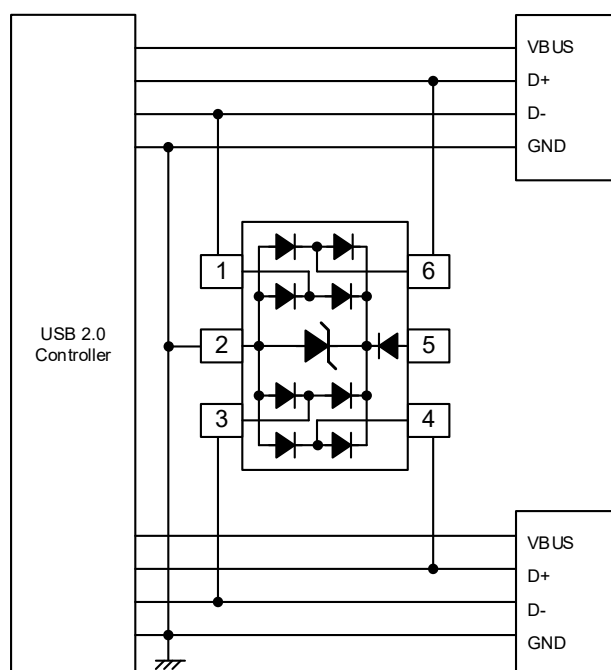
## FEATURES

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

## APPLICATIONS

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

## APPLICATION CIRCUIT

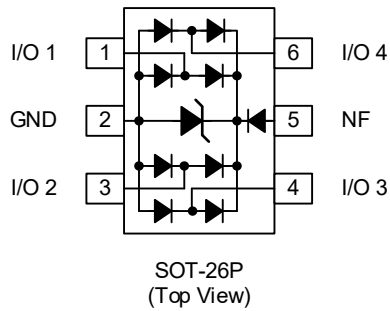


## PRODUCT NAME

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.

## PIN CONFIGURATION



## PIN ASSIGNMENT

PIN NUMBER SOT-26P	PIN NAME	FUNCTION
1	I/O 1	ESD protection
2	GND	Ground
3	I/O 2	ESD protection
4	I/O 3	ESD protection
5	NF	No Function (The NF pin should be floated.)
6	I/O 4	ESD protection

## ABSOLUTE MAXIMUM RATINGS

Ta=25°C

PARAMETER	SYMBOL	RATINGS	UNIT
Junction Temperature	Tj	125	°C
Storage Temperature	Tstg	-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

## ■ ELECTRICAL CHARACTERISTICS

Ta=25°C

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Stand-Off Voltage	$V_{RWM}$		-	-	5	V
Breakdown Voltage	$V_{BR}$	$I_R=1\text{mA}$ , I/O pin to Pin2	6	-	-	V
Leakage Current	$I_R$	$V_R=5\text{V}$ , I/O pin 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=1MHz Between I/O pin to Pin2	-	1.0	1.2	pF
	$C_i$	$V_R=0\text{V}$ , f=1MHz Between I/O pins	-	0.5	0.6	pF

## ■ NOTES ON USE

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

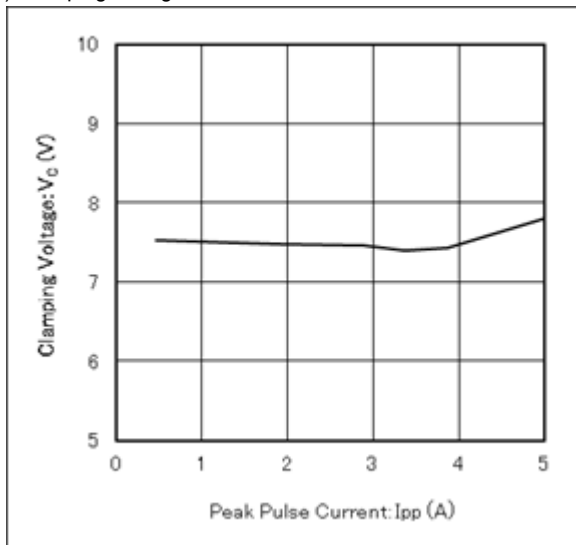
Even within the ratings, in case of high load use continuously such as high temperature, high voltage, high current and thermal stress may cause reliability degradation of the IC.

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

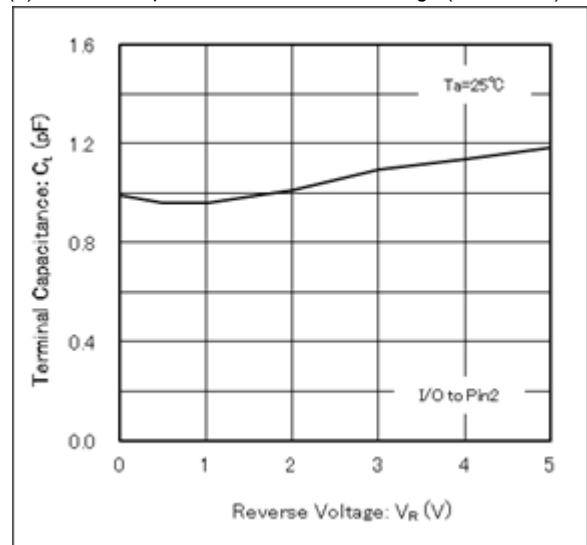
We request that users incorporate fail-safe designs and post-aging protection treatment when using Torex products in their systems.

## TYPICAL PERFORMANCE CHARACTERISTICS

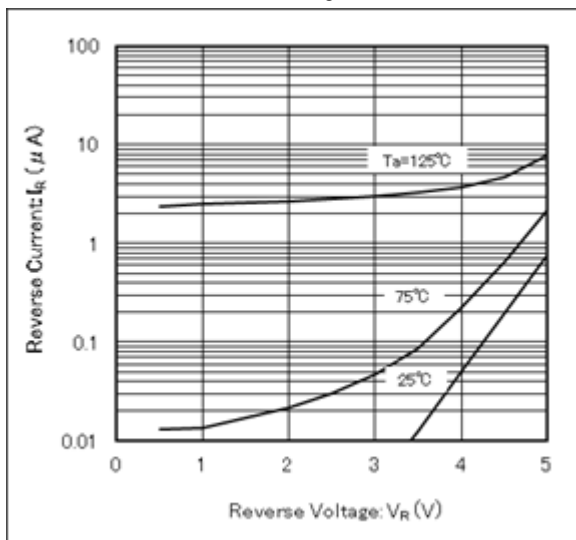
(1) Clamping Voltage vs. Peak Pulse Current



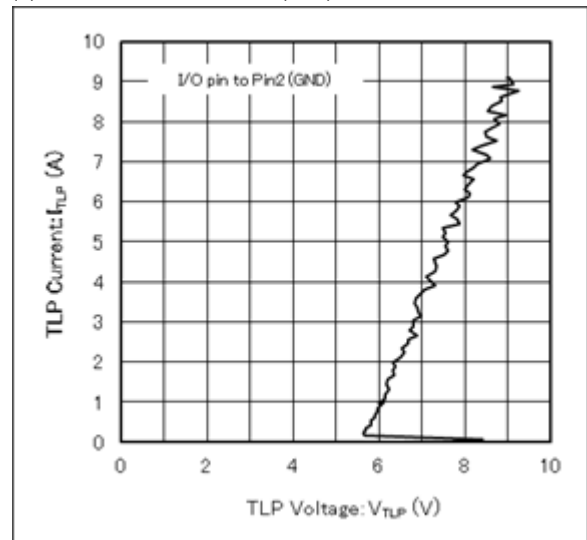
(2) Terminal Capacitance vs. Reverse Voltage (I/O to Pin2)



(3) Reverse Current vs. Reverse Voltage



(4) Transmission Line Pulse (TLP) Measurement

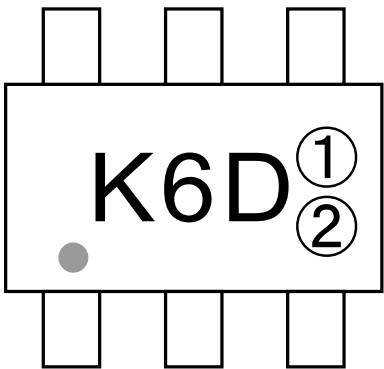


**■PACKAGING INFORMATION**

For the latest package information go to, [www.torexsemi.com/technical-support/packages](http://www.torexsemi.com/technical-support/packages)

PACKAGE	OUTLINE / LAND PATTERN
SOT-26P	<a href="#">SOT-26P PKG</a>

**■MARKING**



①② : Control Number

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