XBP15SRV05W-G

ETR29020-001

Low Capacitance TVS Diode Array

■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

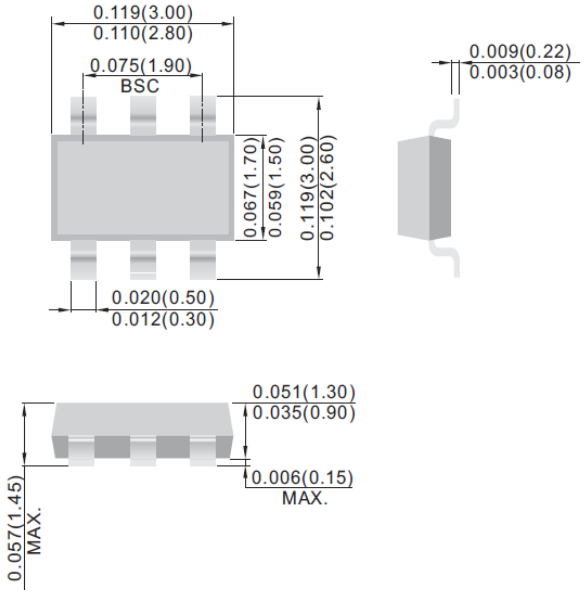
■PRODUCT NAME

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

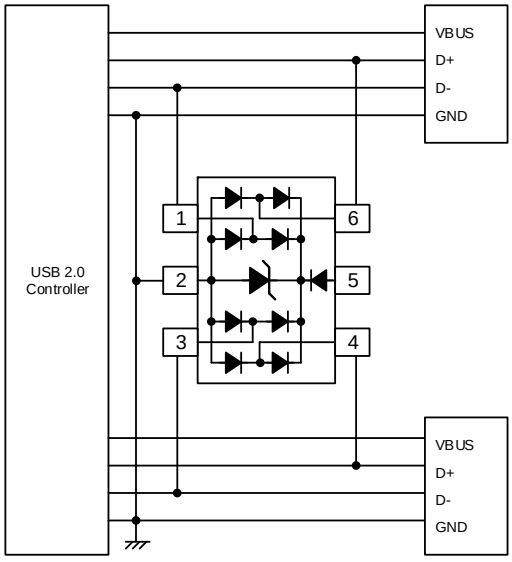
* The “-G” suffix denotes Halogen and Antimony free as well as being fully EU RoHS compliant.

■PACKAGING INFORMATION

●SOT-26P Unit : inch (mm)



■APPLICATION CIRCUIT



■ABSOLUTE MAXIMUM RATINGS

Ta=25℃

PARAMETER	SYMBOL	RATINGS	UNIT
VDD Pin (Pin 5) Voltage	V_{DD}	-0.3 ～ +6.0	V
I/O Pin (Pin 1,3,4,6) Voltage	$V_{I/O}$	-0.3 ～ V_{DD}+0.3	V
Junction Temperature	Tj	125	℃
Storage Temperature	Tstg	-55 to +150	℃
IEC61000-4-2 (ESD) Air	V_{ESD_A}	±15	kV
IEC61000-4-2 (ESD) Contact	V_{ESD_C}	±10	kV

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

■ELECTRICAL CHARACTERISTICS

Ta=25℃

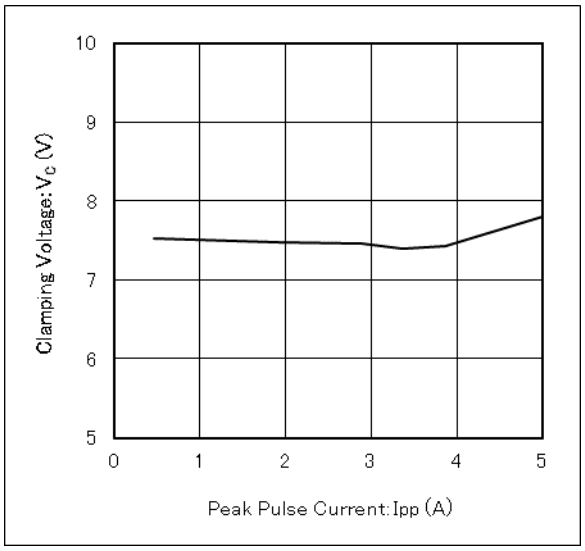
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Stand-Off Voltage	V_{RWM}		-	-	5	V
Breakdown Voltage	V_{BR}	I_R=1mA, Pin5 to Pin2	6	-	-	V
Leakage Current	I_R	V_R=5V, Pin5 to Pin2	-	-	5	μA
Clamping Voltage (8/20μs)	V_C	I_{PP}=3A, I/O pin to Pin2	-	-	10	V
Terminal Capacitance	C_t	V_R=0V,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

■NOTES ON USE

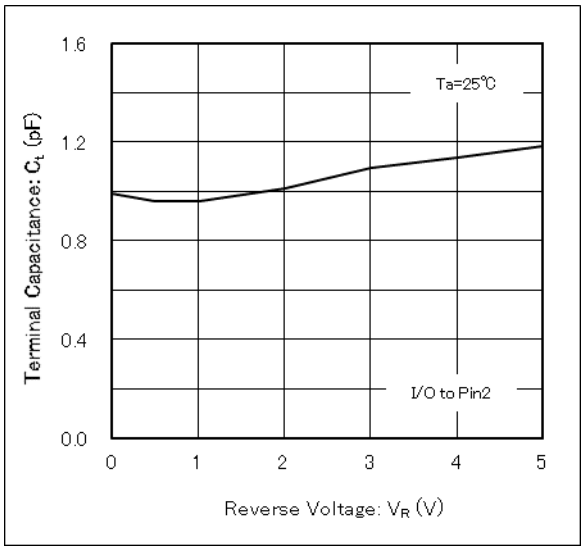
1. Please use this IC within the absolute maximum ratings.
   Even within the ratings, in case of high load use continuously such as high temperature, high voltage, high current and thermal stress may cause reliability degradation of the IC.
2. Torex places an importance on improving our products and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

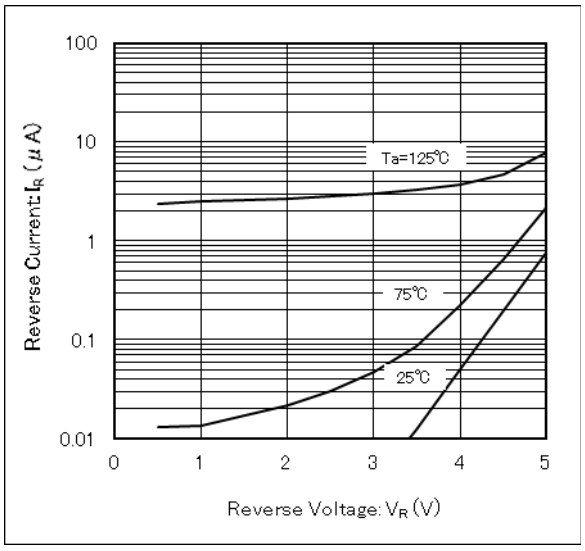
(1) Clamping Voltage vs. Peak Pulse Current



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



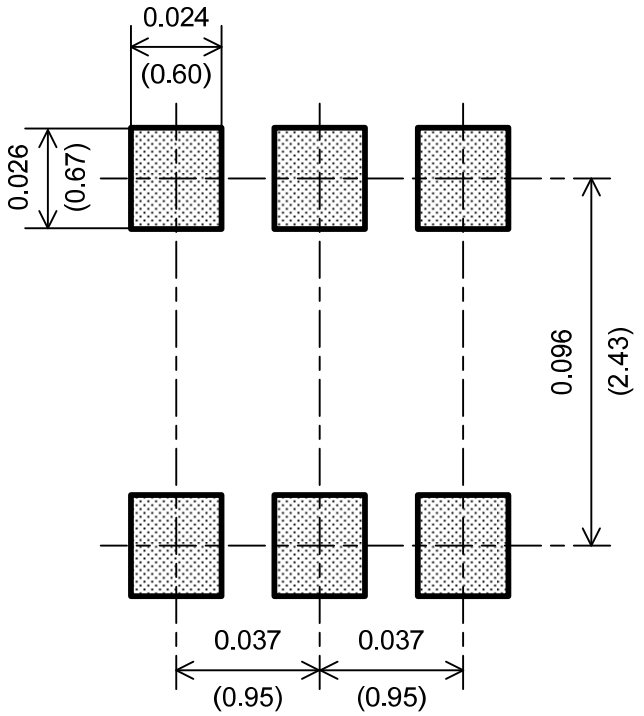
(3) Reverse Current vs. Reverse Voltage



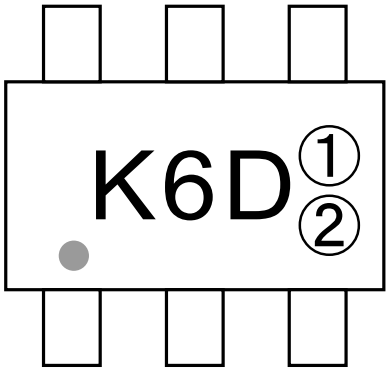
■REFERENCE PATTERN LAYOUT

●SOT-26P

Unit : inch (mm)



■MARKING

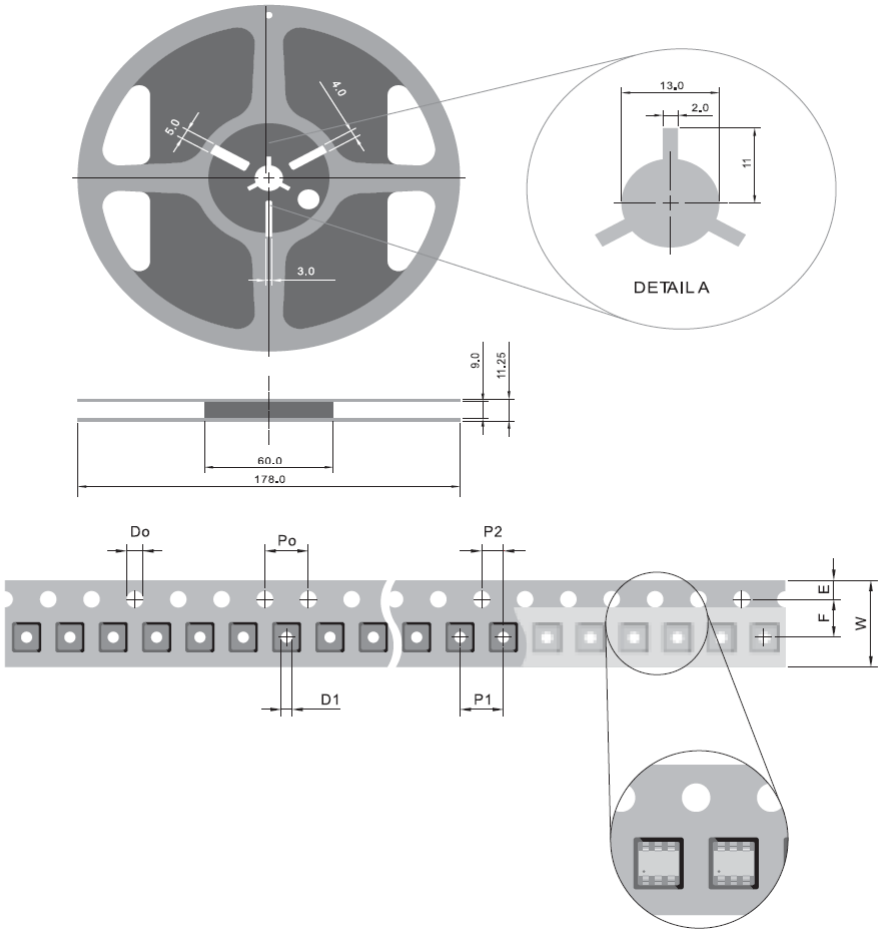


①② : Control Number

■TAPING SPECIFICATIONS

●SOT-26P

Unit : mm



SYMBOL	mm
D_0	1.55 ± 0.05
D1	1.00 + 0.25 - 0.10
E	1.75 ± 0.10
F	3.50 ± 0.05
P_0	4.00 ± 0.10
P1	4.00 ± 0.10
P2	2.00 ± 0.05
W	8.00 + 0.30 - 0.15

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