

# XBP1006

ETR29006-001

## Low Capacitance TVS Diode Array

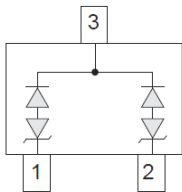
### FEATURES

<b>Terminal Capacitance</b>	: 1.0pF (Pin1-3, Pin2-3)
<b>ESD Protection</b>	: 8kV Contact (IEC61000-4-2)
<b>Environmentally Friendly</b>	: EU RoHS Compliant, Pb Free

### APPLICATIONS

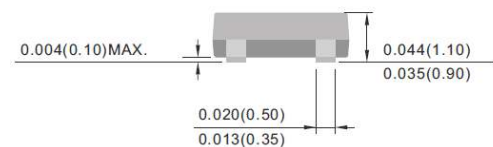
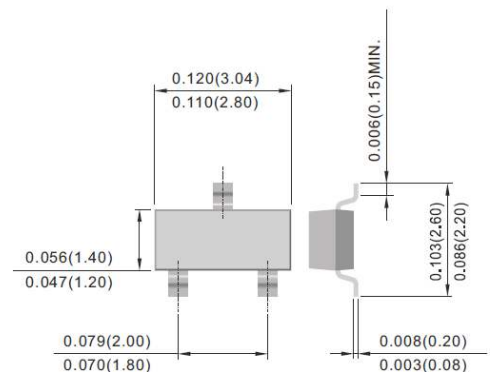
- Portable equipment
- Networking equipment

### PIN CONFIGURATION



### PACKAGING INFORMATION

- SOT-23P Unit: inch (mm)



### PRODUCT NAME

PRODUCT NAME	PACKAGE	ORDER UNIT
XBP1006-G *	SOT-23P	3,000 / 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>	400	W
Peak Pulse Current (8/20 μs Waveform)	I <sub>pp</sub>	17	A
Junction Temperature	T <sub>j</sub>	-55 to 150	°C
Storage Temperature	T <sub>stg</sub>	-55 to 150	°C

## ■ ELECTRICAL CHARACTERISTICS

Ta=25°C

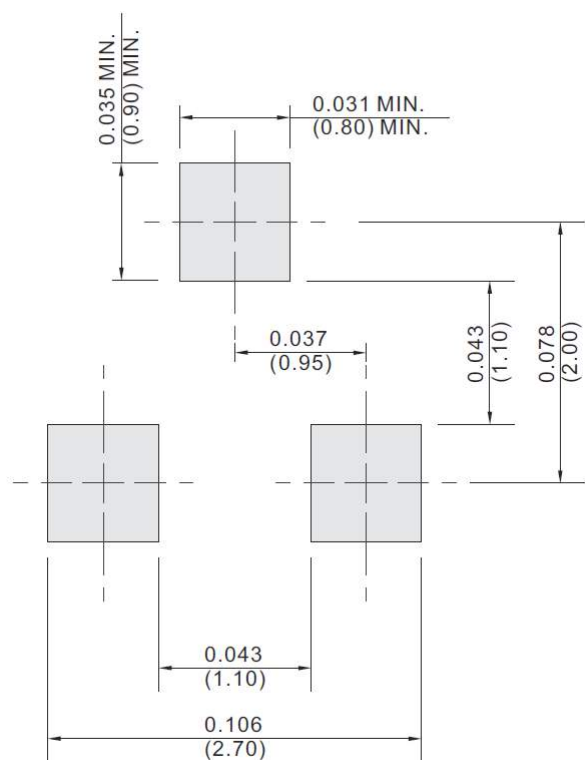
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNITS
			MIN.	TYP.	MAX.	
Stand-Off Voltage	$V_{RWM}$		-	-	5	V
Breakdown Voltage	$V_{BR}$	$I_R=1mA$	6	-	-	V
Leakage Current	$I_R$	$V_R=5V$	-	0.8	1.2	$\mu A$
Clamping Voltage (8/20 $\mu s$ )	$V_C$	$I_{PP}=1A$	-	-	9.5	V
Clamping Voltage (8/20 $\mu s$ )	$V_C$	$I_{PP}=5A$	-	-	12	V
Terminal Capacitance	$C_t$	$V_R=0V$ , f=1MHz Between Pin1,2 to 3	-	-	1.0	pF

## ■ NOTES ON USE

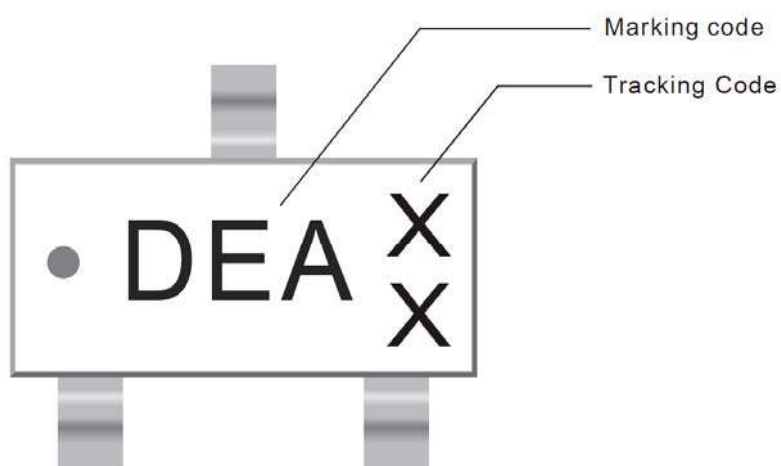
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Even within the ratings, in case of high load use continuously such as high temperature, high voltage, high current and thermal stress may cause reliability degradation of the IC.
2. Torex places an importance on improving our products and their reliability.  
We request that users incorporate fail-safe designs and post-aging protection treatment when using Torex products in their systems.

## REFERENCE PATTERN LAYOUT

### ●SOT-23P

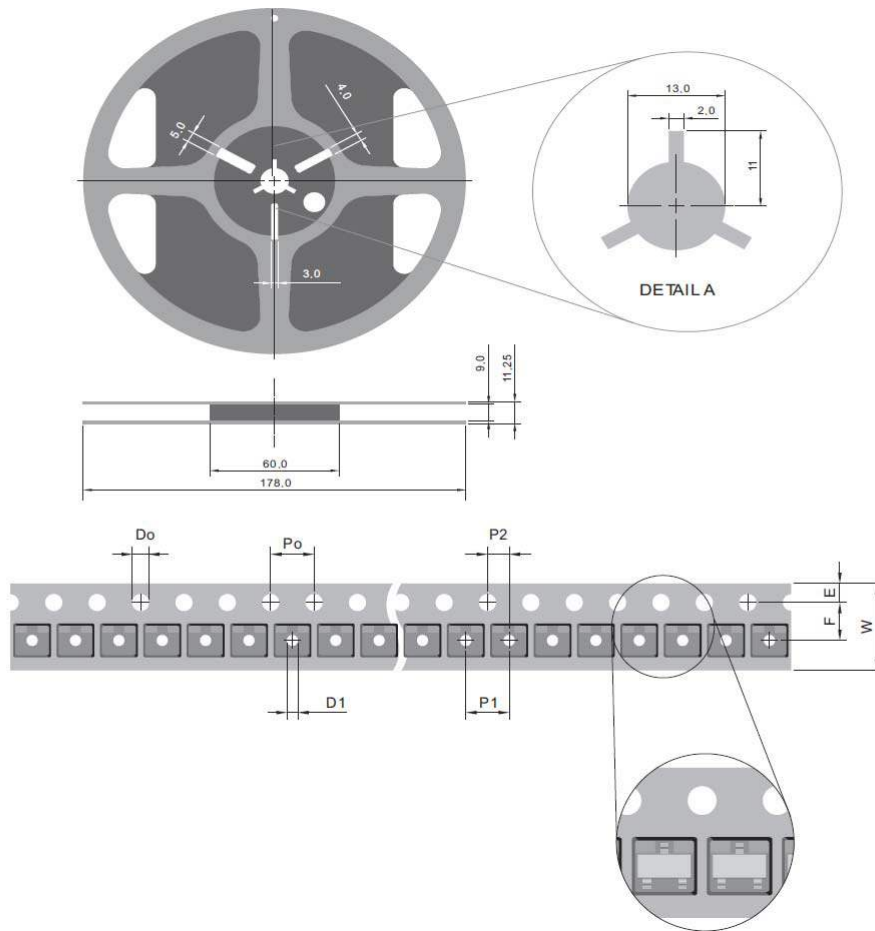


## MARKING



## TAPING SPECIFICATIONS

●SOT-23P



SYMBOL	mm
D0	$1.50 \pm 0.10$
D1	$1.00 \pm 0.25$
E	$1.75 \pm 0.10$
F	$3.50 \pm 0.05$
P0	$4.00 \pm 0.10$
P1	$4.00 \pm 0.10$
P2	$2.00 \pm 0.05$
W	$8.00 \begin{matrix} +0.3 \\ -0.15 \end{matrix}$

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