ETR39003-001

#### Zener Diode

#### **■**FEATURES

Environmentally Friendly : EU RoHS Compliant, Pb Free

#### ■APPLICATIONS

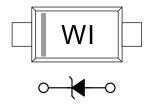
Voltage Regulation

## **■PRODUCT NAME**

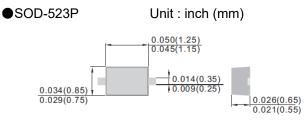
PRODUCT NAME	PACKAGE	ORDER UNIT
XBZ02P1201-G *	SOD-523P	5,000/Reel

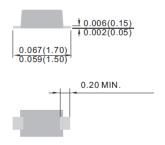
<sup>\*</sup> The "-G" suffix denotes Halogen and Antimony free as well as being fully EU RoHS compliant

### **■**MARKING



## ■ PACKAGING INFORMATION





## ■ ABSOLUTE MAXIMUM RATINGS

Ta=25°C

PARAMETER	SYMBOL	RATINGS	UNIT
Power Dissipation	Pd	200 (*1)	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55 to +150	°C

<sup>(\*1)</sup> PCB mounted

## **■**ELECTRICAL CHARACTERISTICS

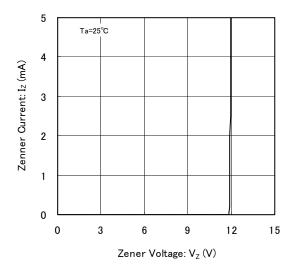
Ta=25°C

PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			LINUT
			MIN.	TYP.	MAX.	UNIT
Zener Voltage	Vz	V <sub>z</sub> I <sub>ZT</sub> =5mA		12	12.6	V
Zener Impedance	Z <sub>ZT1</sub>	I <sub>ZT</sub> =5mA	-	-	25	Ω
	Z <sub>ZT2</sub>	I <sub>ZT</sub> =1mA	-	-	150	Ω
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =8.0V	-	-	0.1	μA

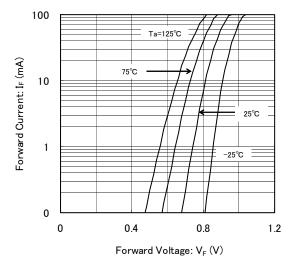
# XBZ02P1201-G

## **■**TYPICAL PERFORMANCE CHARACTERISTICS

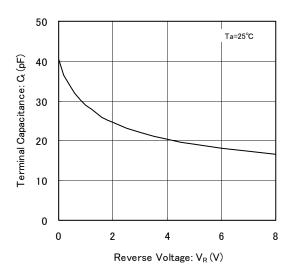
#### (1) Zener Current vs. Zener Voltage



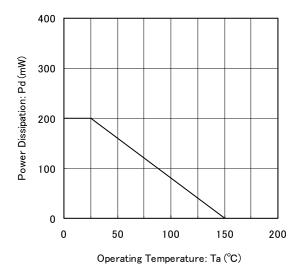
#### (2) Forward Current vs. Forward Voltage



(3) Terminal Capacitance vs. Reverse Voltage



(4) Power Dissipation vs. Operating Temperature



## ■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.

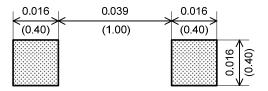
2. Torex places an importance on improving our products and their reliability.

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

## ■REFERENCE PATTERN LAYOUT

#### ●SOD-523P

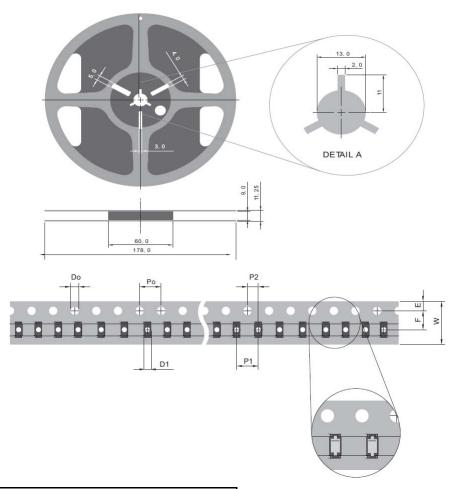
Unit: inch (mm)



# XBZ02P1201-G

# ■TAPING SPECIFICATIONS

●SOD-523P



	SYMBOL	mm
'	D <sub>0</sub>	1.50 ± 0.10
	D1	0.50 ± 0.25
	E	1.75 ± 0.10
	F	$3.50 \pm 0.05$
	P <sub>0</sub>	4.00 ± 0.10
	P1	4.00 ± 0.10
	P2	2.00 ± 0.05
	W	8.00 + 0.3 - 0.15

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1N5369B 1N747A 1N959B 1N964B 1N966B 1N968B 1N972B NTE149A NTE5116A NTE5121A NTE5147A NTE5152A NTE5155A

NTE5164A JANS1N4974US 1N4692 1N4700 1N4702 1N4704 1N4711 1N4714 1N4737A 1N4745ARL 1N4752A 1N4752ARL

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