ETR39003-001

#### Zener Diode

#### **■**FEATURES

Environmentally Friendly : EU RoHS Compliant, Pb Free

#### ■APPLICATIONS

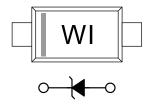
Voltage Regulation

## **■PRODUCT NAME**

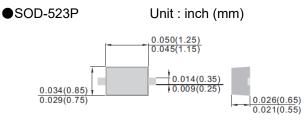
PRODUCT NAME	PACKAGE	ORDER UNIT
XBZ02P1201-G *	SOD-523P	5,000/Reel

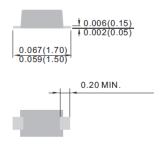
<sup>\*</sup> The "-G" suffix denotes Halogen and Antimony free as well as being fully EU RoHS compliant

### **■**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

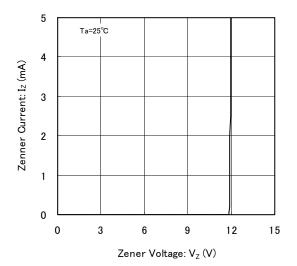
Ta=25°C

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

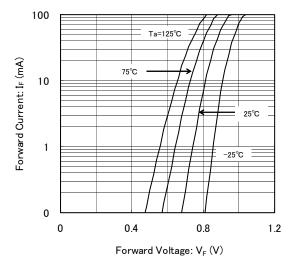
# XBZ02P1201-G

## **■**TYPICAL PERFORMANCE CHARACTERISTICS

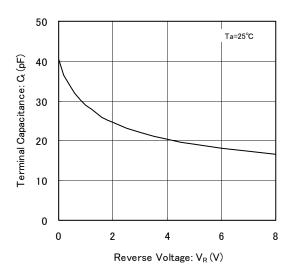
#### (1) Zener Current vs. Zener Voltage



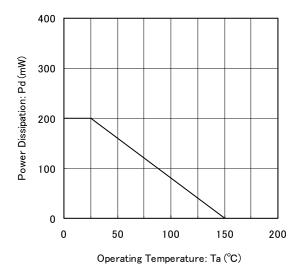
#### (2) Forward Current vs. Forward Voltage



(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.

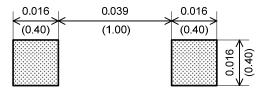
2. Torex places an importance on improving our products and their reliability.

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

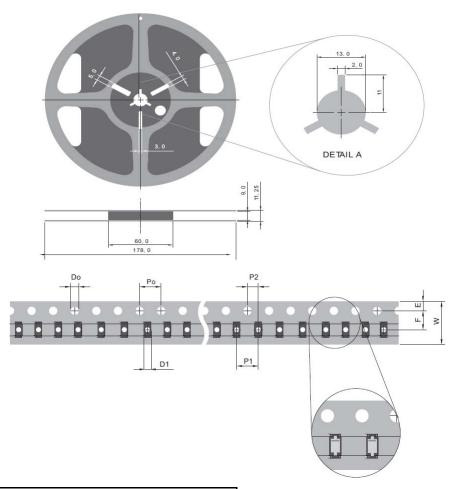
Unit: inch (mm)



# 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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  (e.g. Atomic energy: aerospace: transport: combustion and associated safety.
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