

## Zener Diode

## ■ FEATURES

**Environmentally Friendly** : EU RoHS Compliant, Pb Free

## ■ PRODUCT NAME

PRODUCT NAME	PACKAGE	ORDER UNIT
XBZ02P0911-G *	SOD-523P	5,000/Reel

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

## ■ MARKING



## ■ ABSOLUTE MAXIMUM RATINGS

Ta=25°C

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

(\*) PCB mounted

## ■ ELECTRICAL CHARACTERISTICS

Ta=25°C

PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Zener Voltage	V <sub>Z</sub>	I <sub>ZT</sub> =5mA	8.65	9.1	9.56	V
Zener Impedance	Z <sub>ZT1</sub>	I <sub>ZT</sub> =5mA	-	-	15	Ω
	Z <sub>ZT2</sub>	I <sub>ZT</sub> =1mA	-	-	100	Ω
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =6.0V	-	-	0.5	μA

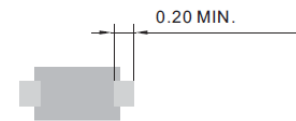
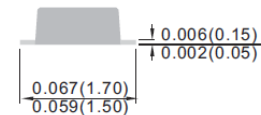
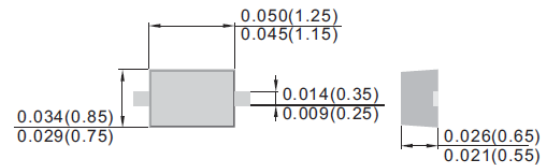
## ■ APPLICATIONS

- Voltage Regulation

## ■ PACKAGING INFORMATION

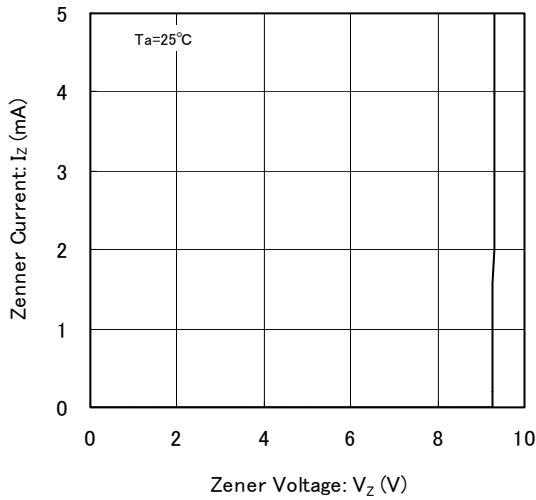
- SOD-523P

Unit : inch (mm)

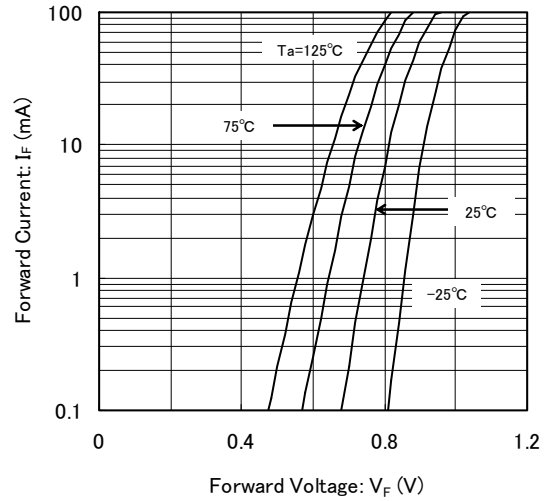


## TYPICAL PERFORMANCE CHARACTERISTICS

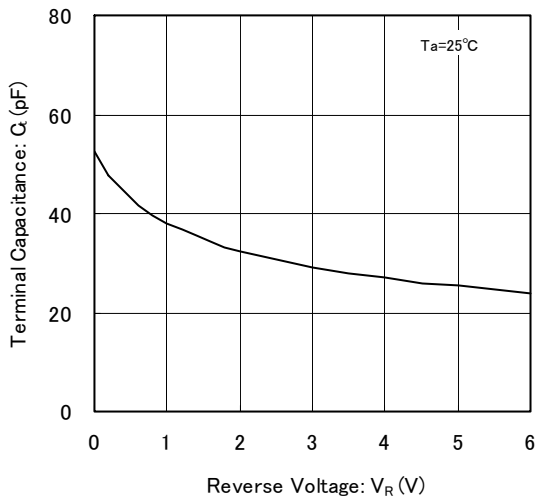
(1) Zener Current vs. Zener Voltage



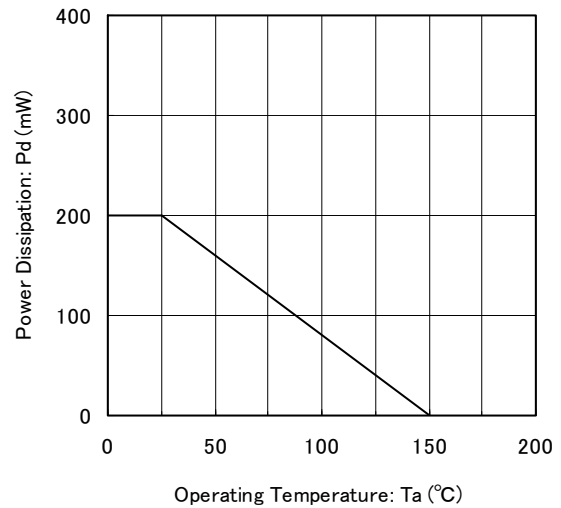
(2) Forward Current vs. Forward Voltage



(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.

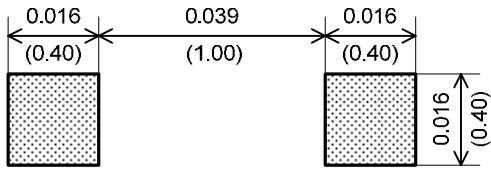
2. Torex places an importance on improving our products and their reliability.

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

## REFERENCE PATTERN LAYOUT

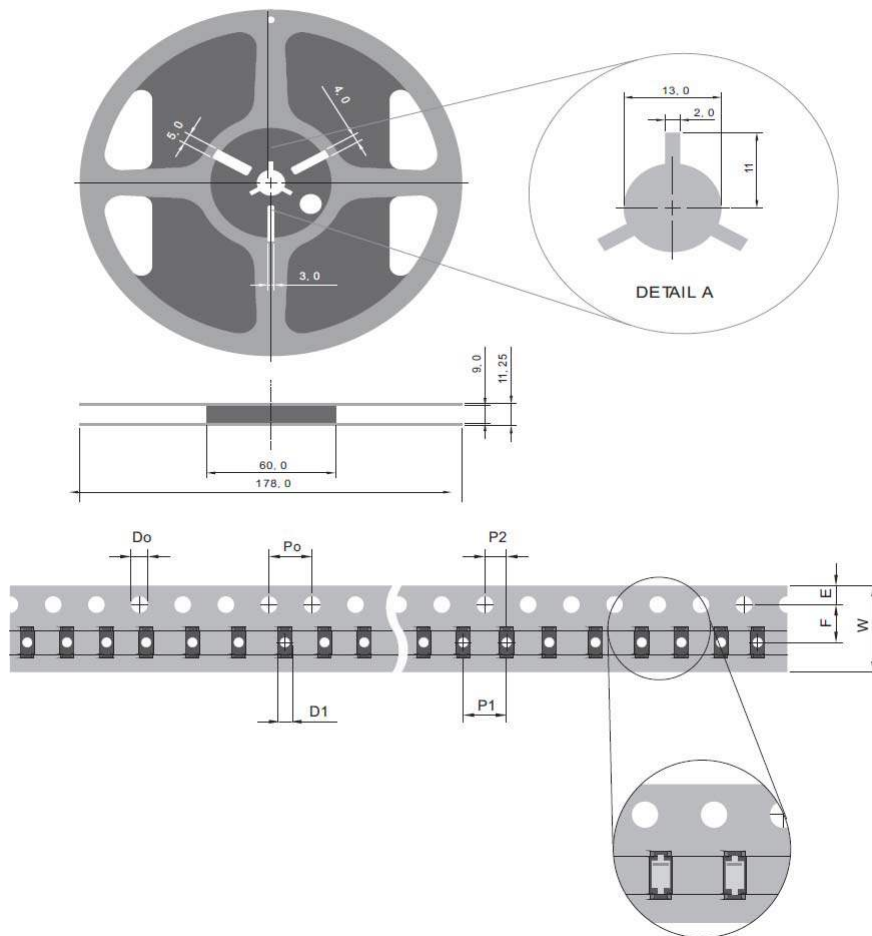
●SOD-523P

Unit : inch (mm)



## TAPING SPECIFICATIONS

●SOD-523P



SYMBOL	mm
D <sub>0</sub>	1.50 ± 0.10
D <sub>1</sub>	0.50 ± 0.25
E	1.75 ± 0.10
F	3.50 ± 0.05
P <sub>0</sub>	4.00 ± 0.10
P <sub>1</sub>	4.00 ± 0.10
P <sub>2</sub>	2.00 ± 0.05
W	8.00 + 0.3 - 0.15

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