

Switching Diode

■ FEATURES

Small Package

Environmentally Friendly : EU RoHS Compliant, Pb Free

■ PRODUCT NAME

PRODUCT NAME	PACKAGE	ORDER UNIT
XBW1SS400-G *	SOD-523P	5,000pcs/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
Reverse Voltage (DC)	V_R	80	V
Peak Reverse Voltage	V_{RM}	90	V
Forward Current (Average)	$I_{F(AV)}$	100	mA
Peak Forward Surge Current ($t=1\mu s$)	I_{FSM}	2	A
Power Dissipation	P_d	200 ^(*)	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

(*) PCB mounted

■ ELECTRICAL CHARACTERISTICS

Ta=25°C

PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Forward Voltage	V_F	$I_F=100mA$			1.20	V
Reverse Current	I_R	$V_R=80V$	-	-	0.1	μA
Terminal Capacitance	C_t	$V_R=0V, f=1MHz$	-	0.5	-	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10mA, irr=1mA, R_L=100\Omega$	-	4	-	ns

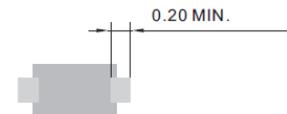
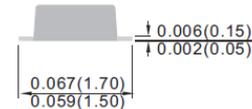
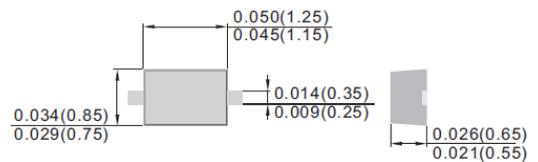
■ APPLICATIONS

● High-speed Switching

■ PACKAGING INFORMATION

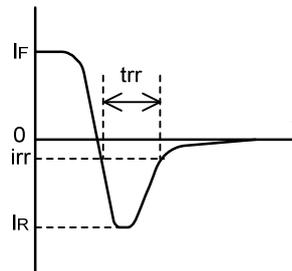
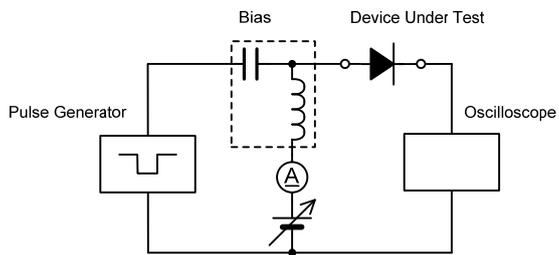
● SOD-523P

Unit : inch (mm)



MEASUREMENT CIRCUITS

Reverse Recovery Time



NOTES ON USE

1. Please use this IC within the absolute maximum ratings.

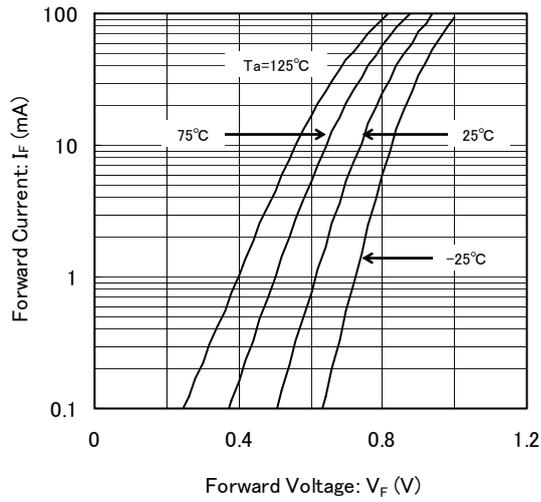
Even within the ratings, in case of high load use continuously such as high temperature, high voltage, high current and thermal stress may cause reliability degradation of the IC.

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

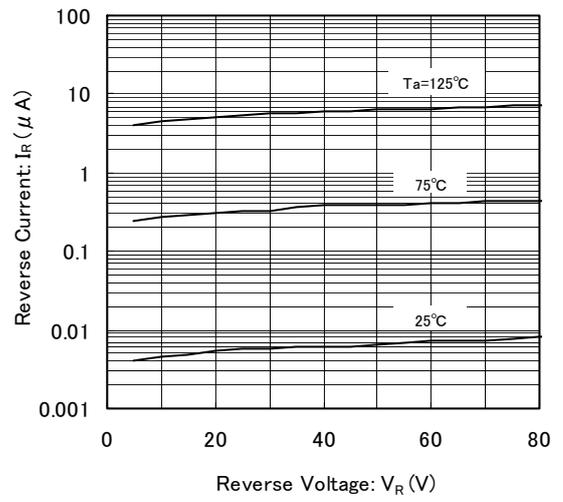
We request that users incorporate fail-safe designs and post-aging protection treatment when using Torex products in their systems.

■ TYPICAL PERFORMANCE CHARACTERISTICS

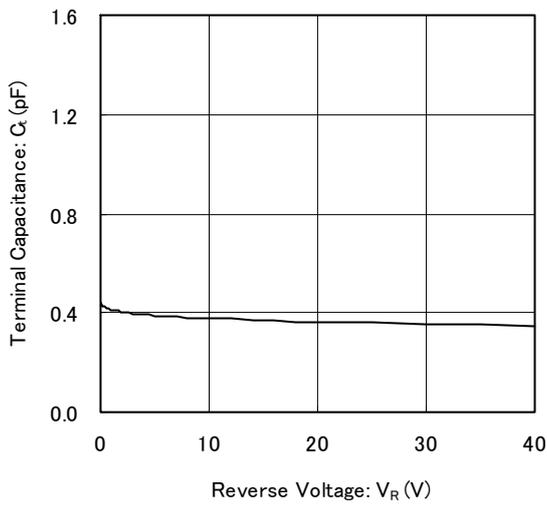
(1) Forward Current vs. Forward Voltage



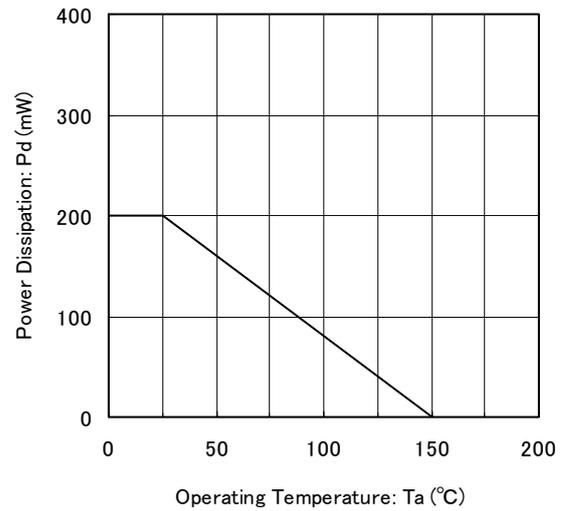
(2) Reverse Current vs. Reverse Voltage



(3) Terminal Capacitance vs. Reverse Voltage



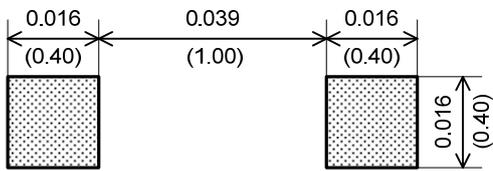
(4) Power Dissipation vs. Operating Temperature



REFERENCE PATTERN LAYOUT

●SOD-523P

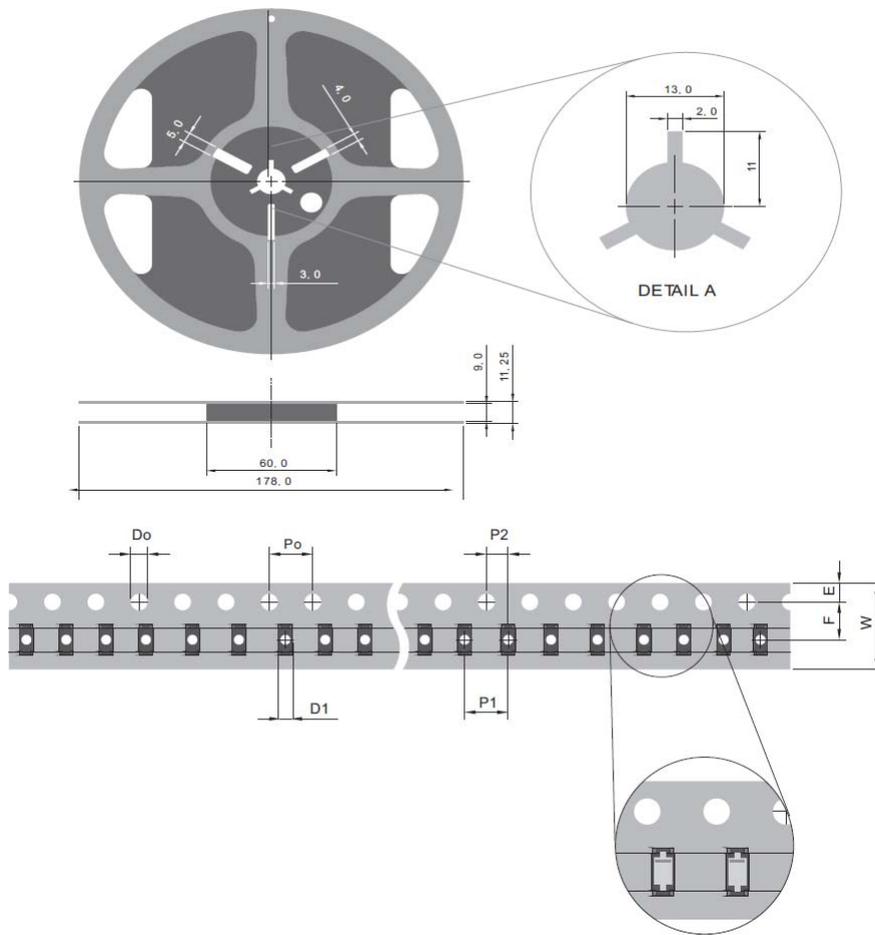
Unit : inch (mm)



TAPING SPECIFICATIONS

●SOD-523P

Unit : mm



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

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