XBW21P0204-G

TOREX

ETR38001-001

Switching Diode

■FEATURES

Two elements
Small Package
Environmentally Friendly : EU RoHS Compliant, Pb Free

■APPLICATIONS

●High-speed Switching

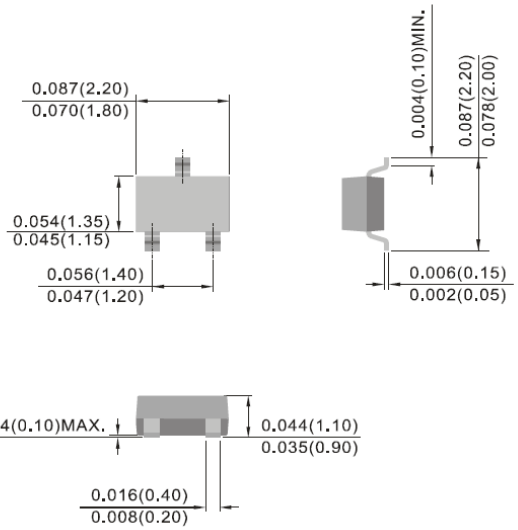
■PRODUCT NAME

PRODUCT NAME	PACKAGE	ORDER UNIT
XBW21P0204-G *	SOT-323	3,000/Reel

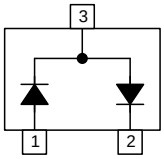
* The “-G” suffix denotes Halogen and Antimony free as well as being fully EU RoHS compliant.

■ PACKAGING INFORMATION

●SOT-323 Unit : inch (mm)



■PIN CONFIGURATION



■ ABSOLUTE MAXIMUM RATINGS

Ta=25℃

PARAMETER	SYMBOL	RATINGS	UNIT
Reverse Voltage (DC)	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Forward Current (Average)	$I_{F(AV)}$	150	mA
Peak Forward Surge Current (t=1μs)	I_{FSM}	4	A
Power Dissipation	Pd	200	mW
Junction Temperature	Tj	150	℃
Storage Temperature	Tstg	-55 to +150	℃

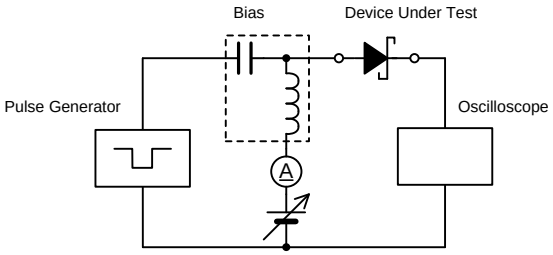
■ELECTRICAL CHARACTERISTICS

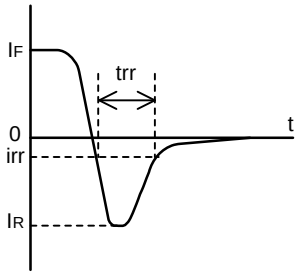
Ta=25℃

PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNITS
			MIN.	TYP.	MAX.	
Forward Voltage	V_{F1}	I_F=10mA	-	-	0.855	V
	V_{F2}	I_F=50mA			1.00	V
	V_{F3}	I_F=150mA			1.25	V
Reverse Current	I_R	V_R=25V	-	-	0.03	μA
Terminal Capacitance	C_t	V_R=0V, f=1MHz	-	-	1.5	pF
Reverse Recovery Time	trr	I_F=I_R=10mA, irr=1mA, R_L=100Ω	-	4	-	ns

■ MEASUREMENT CIRCUITS

●Reverse Recovery Time





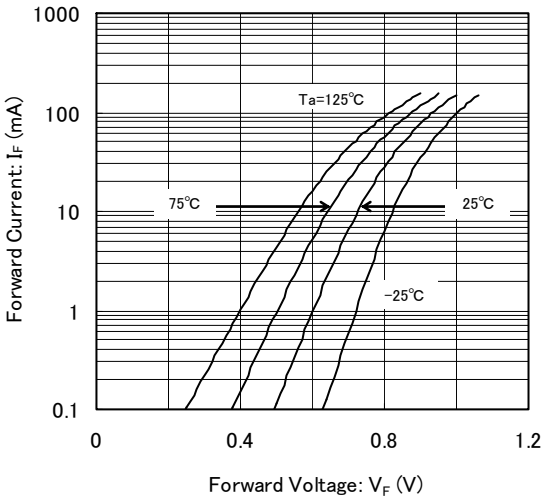
■NOTES ON USE

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.

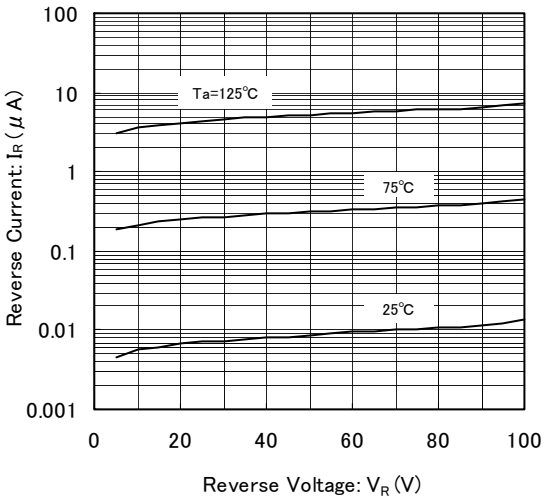
2. Torex places an importance on improving our products and their reliability.
We request that users incorporate fail-safe designs and post-aging protection treatment when using Torex products in their systems.

■TYPICAL PERFORMANCE CHARACTERISTICS

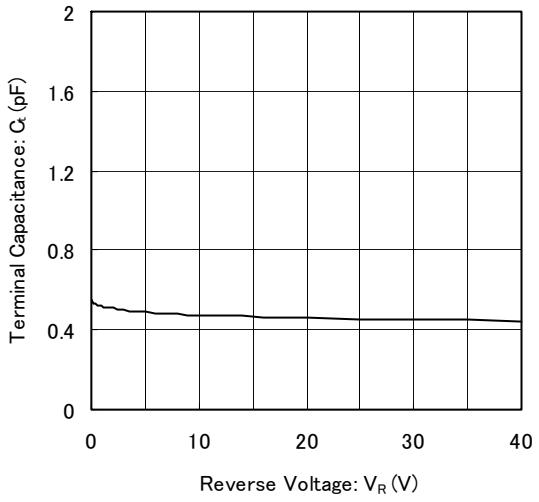
(1) Forward Current vs. Forward Voltage



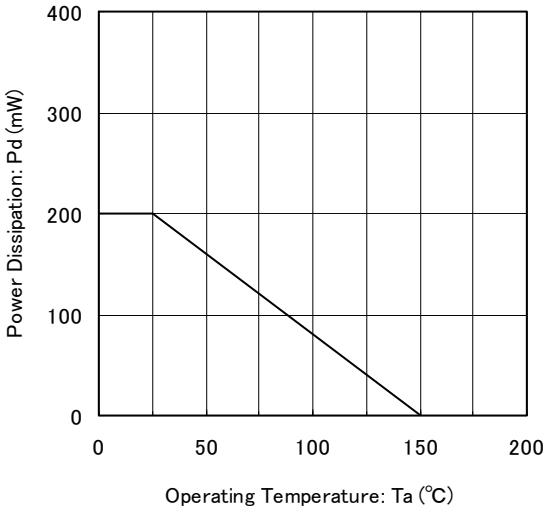
(2) Reverse Current vs. Reverse Voltage



(3) Terminal Capacitance vs. Reverse Voltage



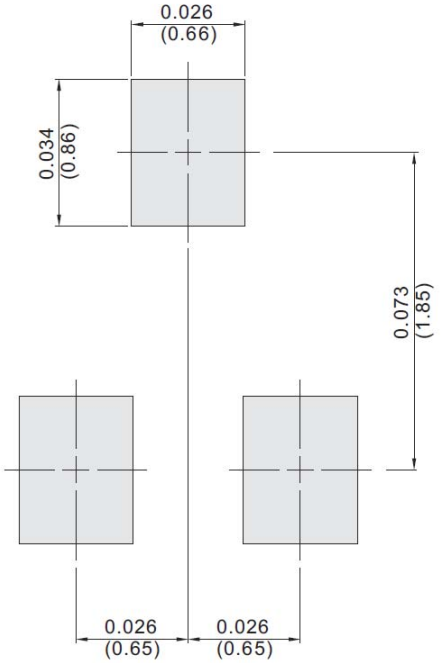
(4) Power Dissipation vs. Operating Temperature



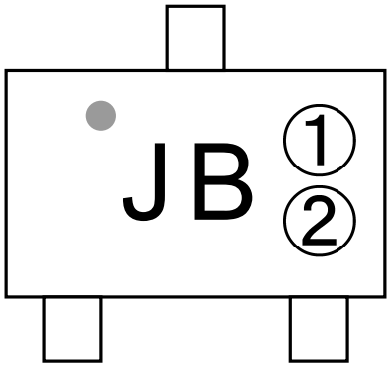
■REFERENCE PATTERN LAYOUT

●SOT-323

Unit : inch (mm)



■ MARKING

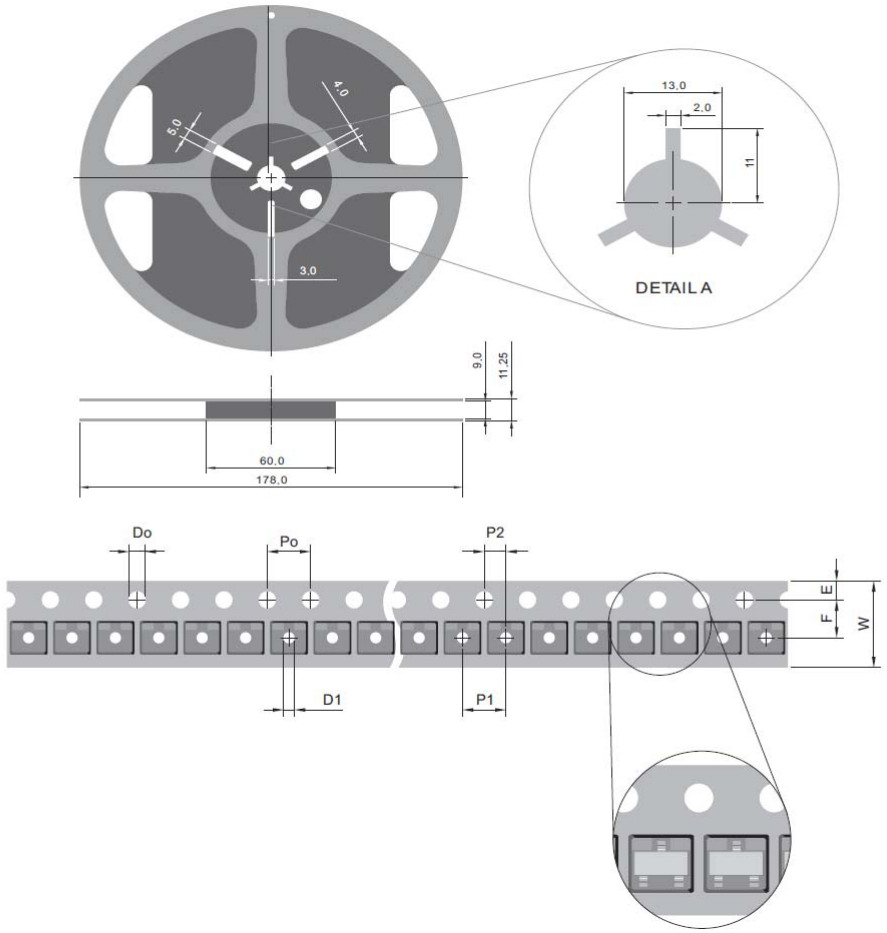


①② : Control Number

■TAPING SPECIFICATIONS

●SOT-323

Unit : mm



SYMBOL	mm
D_0	1.55 ± 0.05
D1	1.00 ± 0.25
E	1.75 ± 0.10
F	3.50 ± 0.05
P_0	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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