

XBS306P11R-G

ETR16029-001

Schottky Barrier Diode, 3A, 60V Type

FEATURES

Low Forward voltage

Environmentally Friendly : EU RoHS Compliant

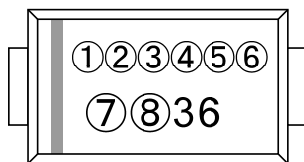
PRODUCT NAME

PRODUCT NAME	PACKAGE	ORDER UNIT
XBS306P11R-G *	SMA-PG	1,800/Reel

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

* The high-melting solder paste (lead-containing) is used as attachment.

MARKING



①②③④⑤⑥⑦⑧: Control Number



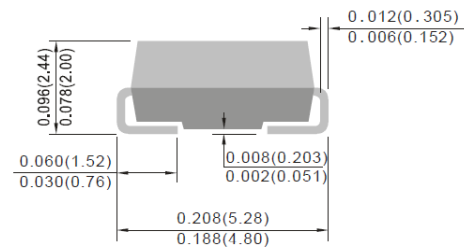
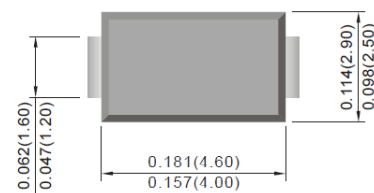
APPLICATIONS

- Rectification
- Protection against reverse connection of battery

PACKAGING INFORMATION

● SMA-PG

Unit : inch (mm)



ABSOLUTE MAXIMUM RATINGS

Ta=25°C

PARAMETER	SYMBOL	RATINGS	UNITS
Repetitive Peak Reverse Voltage	V_{RM}	60	V
Reverse Voltage (DC)	V_R	60	V
Forward Current (Average) at Ta=75°C	$I_{F(AV)}$	3	A
Non Continuous Forward Surge Current (8.3 ms single half-sine wave)	I_{FSM}	80	A
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

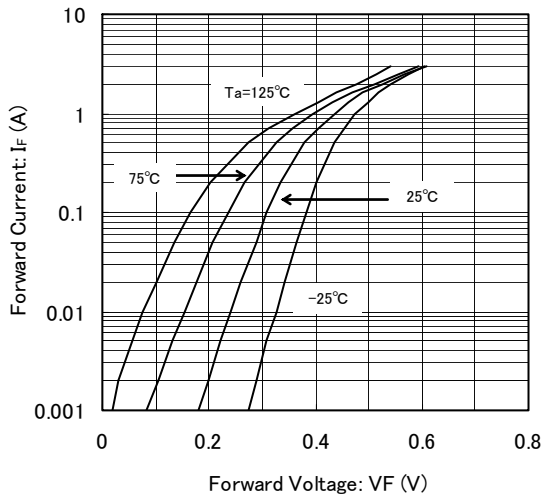
ELECTRICAL CHARACTERISTICS

Ta=25°C

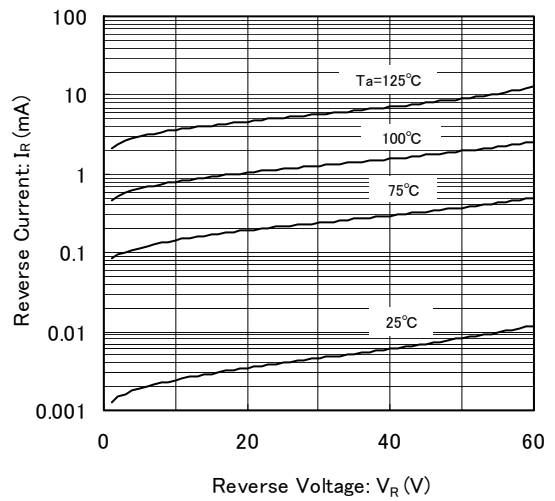
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNITS
			MIN.	TYP.	MAX.	
Forward Voltage	V_F	$I_F=3A$	-	-	0.75	V
Reverse Current	I_R	$V_R=60V$			100	μA

TYPICAL PERFORMANCE CHARACTERISTICS

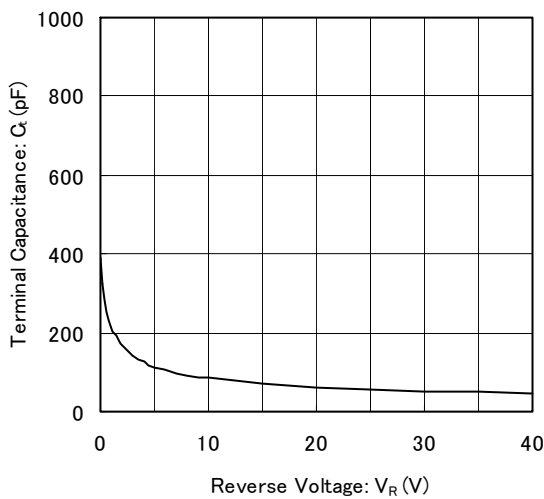
(1) Forward Current vs. Forward Voltage



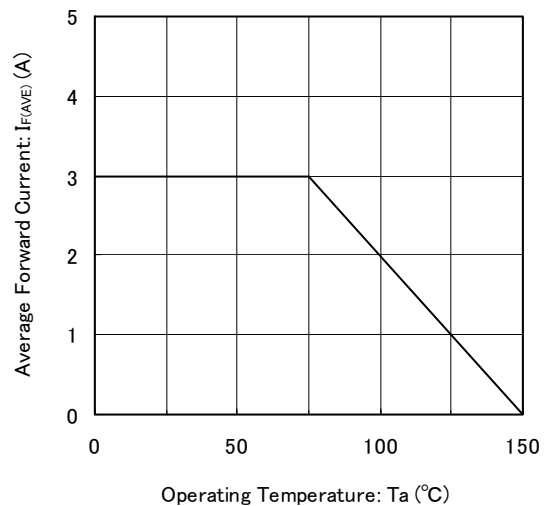
(2) Reverse Current vs. Reverse Voltage



(3) Terminal Capacitance vs. Reverse Voltage



(4) Average Forward Current 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.

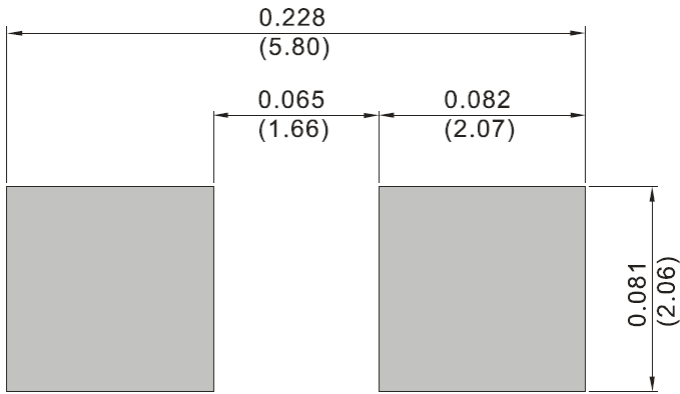
2. Torex places an importance on improving our products and their reliability.

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

REFERENCE PATTERN LAYOUT

●SMA-PG

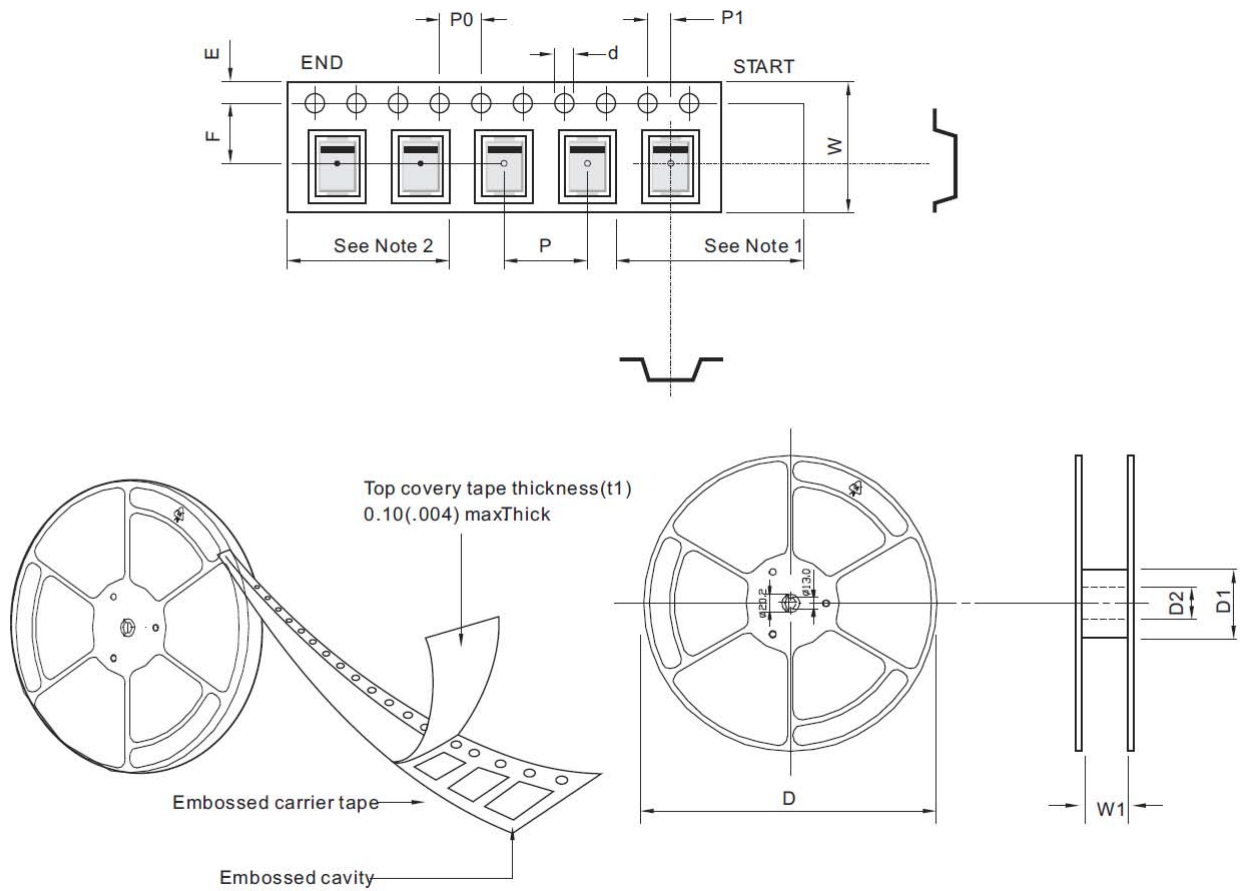
Unit : inch (mm)



XBS306P11R-G

TAPING SPECIFICATIONS

●SMA-PG



Note:

1. There shall be leader of 230mm minimum which may consist of carrier and or cover tape follower by a minimum of 160mm of carrier tape sealed with cover tape.
2. There shall be minimum of 160mm of empty component pockets sealed with cover tape.

SYMBOL	mm
d	1.55 ± 0.05
D	178.0 ± 2.0
D1	min. 50.0
D2	13.0 ± 0.2
E	1.75 ± 0.10
F	5.50 ± 0.10
P	4.00 ± 0.10
P0	4.00 ± 0.10
P1	2.00 ± 0.10
W	12.0 ± 0.3
W1	13.4 ± 1.0

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