

XBS013R1DR-G

TOIREX

ETR1617-005

Schottky Barrier Diode, 100mA, 30V Type

FEATURES

Ultra Small Package
Low I_R

APPLICATIONS

● Low Current Rectification

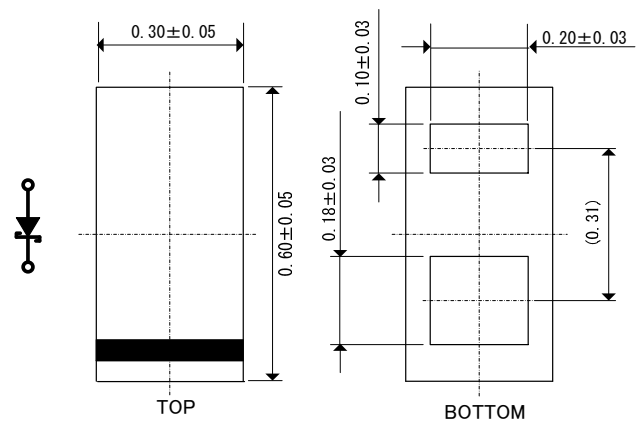
ABSOLUTE MAXIMUM RATINGS

$T_a=25^{\circ}\text{C}$

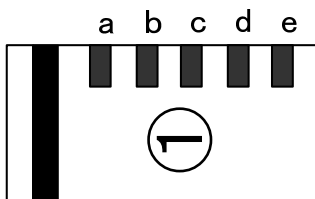
PARAMETER	SYMBOL	RATINGS	UNITS
Repetitive Peak Voltage	V_{RM}	30	V
Reverse Voltage (DC)	V_R	30	V
Forward Current (Average)	$I_{F(AV)}$	100	mA
Peak Forward Surge Current ^{*1}	I_{FSM}	0.5	A
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	$-40\sim+150$	$^{\circ}\text{C}$

*1) 60Hz Half sine wave, 1 cycle, Non-Repetitive.

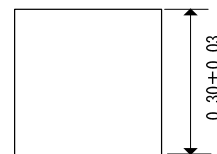
PACKAGING INFORMATION



MARKING RULE



① : 2 (Product Number)
a,b,c,d,e : Lot Number



Unit: mm

PRODUCT NAME

PRODUCT NAME	PACKAGE
XBS013R1DR-G *	USP-2B01

* The "-G" suffix indicates that the products are Halogen and Antimony free as well as being fully RoHS compliant.

* The device orientation is fixed in its embossed tape pocket.

ELECTRICAL CHARACTERISTICS

$T_a=25^{\circ}\text{C}$

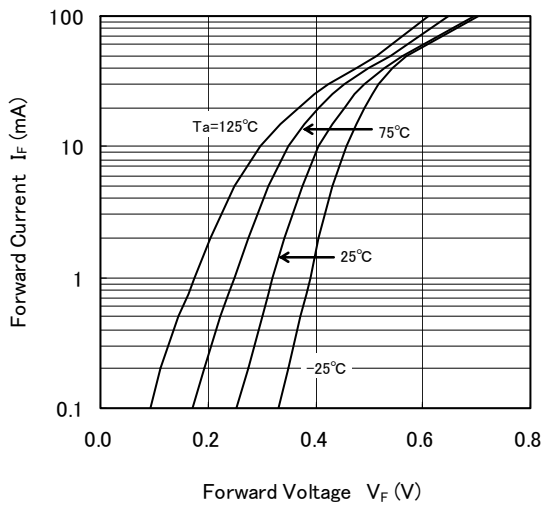
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNITS
			MIN.	TYP.	MAX.	
Forward Voltage	V_{F1}	$I_F=10\text{mA}$	-	-	0.46	V
Reverse Current	I_R	$V_R=10\text{V}$	-	-	0.3	μA

NOTES ON USE

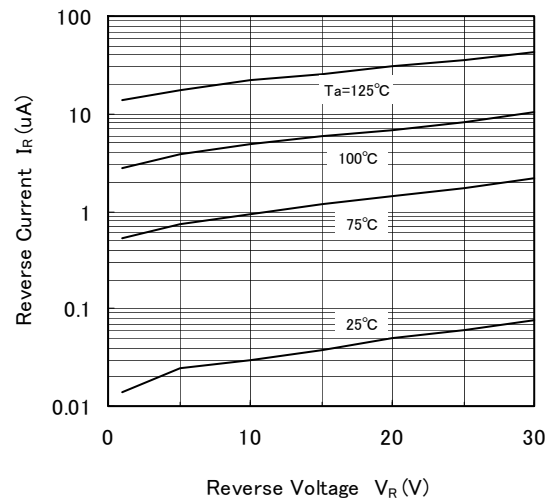
1. A package of this IC is a surface mounted package 0603 size with backside electrode structure. Compare to other packages, fixation strength for the electrodes is weak due to its structure. Please keep away from mechanical stress to the product when mounting or after mounting.
2. If the IC is mounted close to a board break line or fixed in screws, the IC or its electrodes may be caused damage as results of board deformation and mechanical stress.

TYPICAL PERFORMANCE CHARACTERISTICS

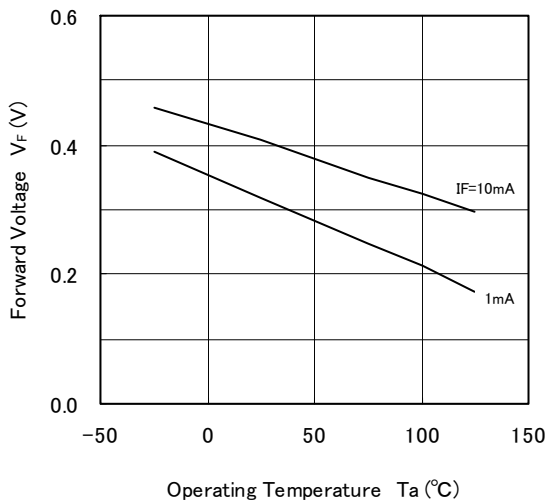
(1) Forward Current vs. Forward Voltage



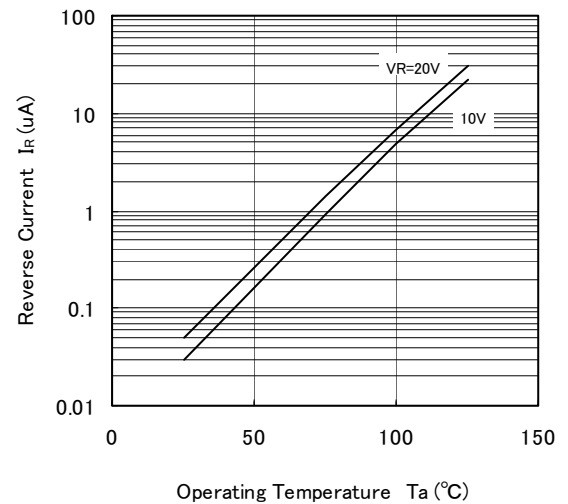
(2) Reverse Current vs. Reverse Voltage



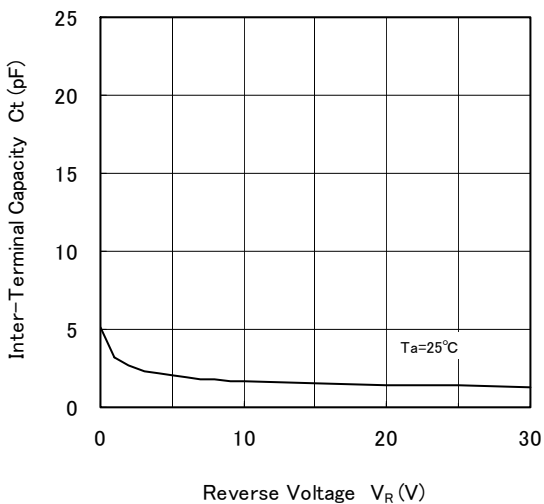
(3) Forward Voltage vs. Operating Temperature



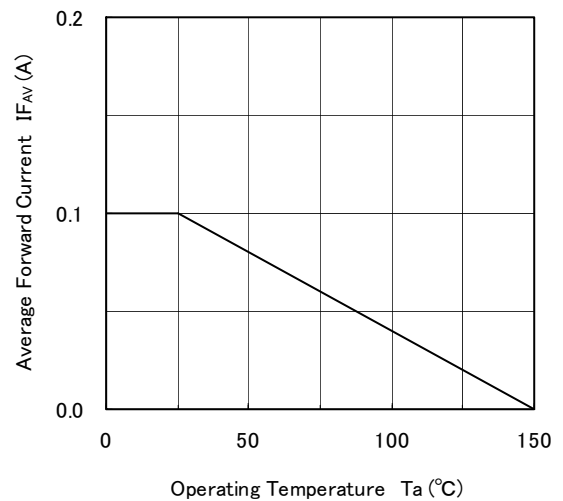
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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