# XBS013V1DR-G



ETR1618-005

# Schottky Barrier Diode, 100mA, 30V Type

# **FEATURES**

Ultra Small Package

Low VF

# **APPLICATIONS**

Low Current Rectification

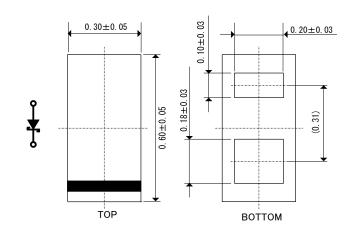
## ABSOLUTE MAXIMUM RATINGS

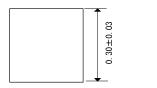
#### Ta=25

PARMETER	SYMBOL	RATINGS	UNITS	
Repetitive Peak Voltage	VRM	30	V	
Reverse Voltage (DC)	VR	30	V	
Forward Current (Average)	lF(AV)	100	mA	
Peak Forward Surge Current *1	IFSM	0.5	Α	
Junction Temperature	Tj	150		
Storage Temperature Range	Tstg	-40 ~ +150		

<sup>\*1) 60</sup>Hz Half sine wave, 1 cycle, Non-Repetitive.

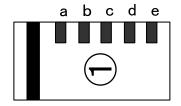
# PACKAGING INFORMATION





Unit: mm

## MARKING RULE



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

# PRODUCT NAME

PRODUCT NAME	PACKAGE
XBS013V1DR-G	USP-2B01

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

# **ELECTRICAL CHARACTERISTICS**

Ta=25

PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNITS
			MIN.	TYP.	MAX.	UNITS
Forward Voltage	VF1	I <sub>F</sub> =10mA	-	-	0.37	V
Reverse Current	lr	V <sub>R</sub> =10V	-	-	7	μA

#### **ONOTES ON USE**

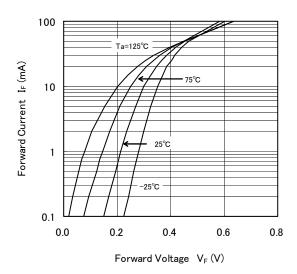
- 1. A package of this IC is a surface mounted package 0603 size with backside electrode structure. Compare to other packages, fixation strength for the electrodes is weak due to its structure. Please keep away from mechanical stress to the product when mounting or after mounting.
- 2. If the IC is mounted 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.

<sup>\*</sup>The device orientation is fixed in its embossed tape pocket.

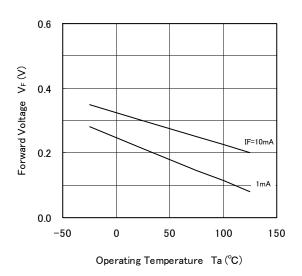
# XBS013V1DR-G

# TYPICAL PERFORMANCE CHARACTERISTICS

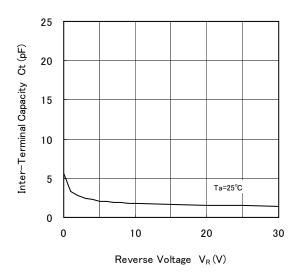
## (1) Forward Current vs. Forward Voltage



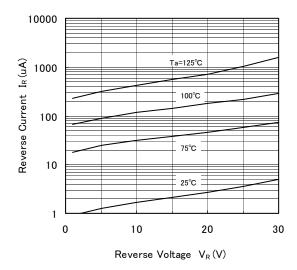
### (3) Forward Voltage vs. Operating Temperature



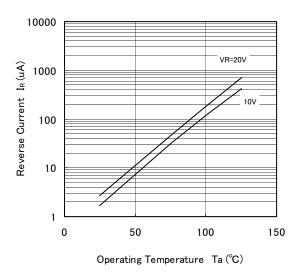
## (5) Inter-Terminal Capacity vs. Reverse Voltage



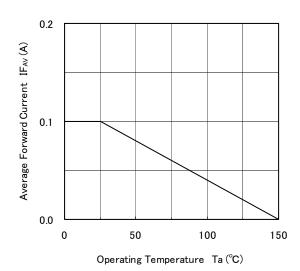
## (2) Reverse Current vs. Reverse Voltage



## (4) Reverse Current vs. Operating Temperature



(6) Average Forward Current vs. Operating Temperature



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