# XBS104S14R-G



ETR1609-003

## Schottky Barrier Diode, 1A, 40V, SOD-123A Package

#### **■**FEATURES

Forward Voltage : V<sub>F</sub>=0.49V (TYP.)

**Forward Current** : I<sub>F(AV)</sub>=1A Repetitive Peak Reverse Voltage : V<sub>RM</sub>=40V

#### **■**APPLICATIONS

Rectification

Protection against reverse connection of battery

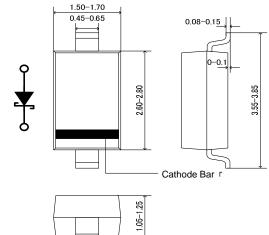
### ■ABSOLUTE MAXIMUM RATINGS

Ta=25°C

PARAMETER	SYMBOL	RATINGS	UNIT	
Repetitive Peak Reverse Voltage	VRM	40	V	
Reverse Voltage (DC)	VR	40	V	
Forward Current (Average)	<b>I</b> F(AV)	1	Α	
Non Continuous	İFSM	10	А	
Forward Surge Current *1				
Junction Temperature	Tj	125	င	
Storage Temperature Range	Tstg	-55~+150	°C	

<sup>\*1 :</sup> Non continuous high amplitude 60Hz half-sine wave.

## ■ PACKAGING INFORMATION





Unit: mm

#### ■MARKING RULE



- 1: 1 (Product Number)
- 2: Assembly Lot Number

#### ■PRODUCT NAME

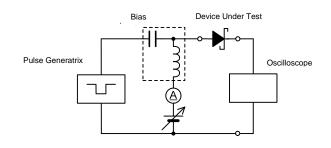
PRODUCT NAME	DESCRIPTION		
XBS104S14R	SOD-123A		
XBS104S14R-G	SOD-123A (Halogen & Antimony free)		

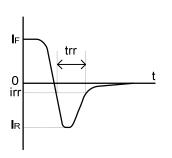
## ■ELECTRICAL CHARACTERISTICS

Ta=25°C

PARAMETER SYMBOL	CVMPOL	SYMBOL TEST CONDITIONS	LIMITS			UNIT
	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT	
Forward Voltage		I <sub>F</sub> =100mA	-	0.34	-	V
	VF2	I <sub>F</sub> =1A	1	0.49	0.54	V
Reverse Current	lr	V <sub>R</sub> =40V	1	4	200	μΑ
Inter-Terminal Capacity	Ct	V <sub>R</sub> =10V ,,f=1MHz	-	35	-	pF
Reverse Recovery Time *2	trr	$I_F = I_R = 10 \text{mA}$ , irr=1 mA , RL=100 $\Omega$	-	25	-	ns

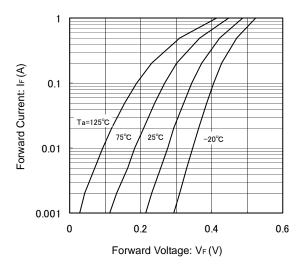
<sup>\*2 :</sup> trr measurement circuit



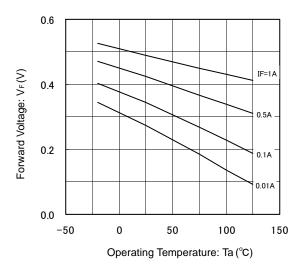


### **■**TYPICAL PERFORMANCE CHARACTERISTICS

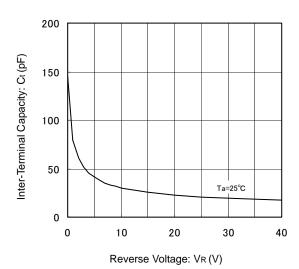
(1) Forward Current vs. Forward Voltage



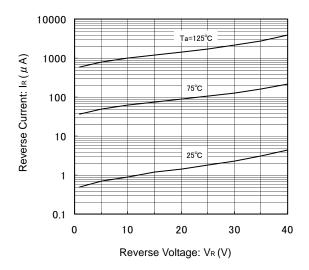
(3) Forward Voltage vs. Operating Temperature



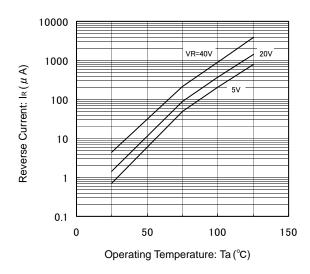
(5) Inter-Terminal Capacity vs. Reverse Voltage



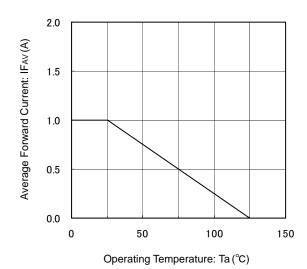
(2) Reverse Current vs. Reverse Voltage



(4) Reverse Current vs. Operating Temperature



(6) Average Forward Current vs. Operating Temperature



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