



**THE DATASHEET OF  
XBS024S15R-G**



# XBS024S15R-G

Schottky Barrier Diode, 200mA, 40V Type

## FEATURES

- Forward Voltage :  $V_F=0.53V$  (TYP.)  
 Forward Current :  $I_{F(AV)}=200mA$   
 Repetitive Peak Reverse Voltage :  $V_{RM}=40V$   
 Environmentally Friendly : EU RoHS Compliant, Pb Free

## ABSOLUTE MAXIMUM RATINGS

$T_a=25^\circ C$

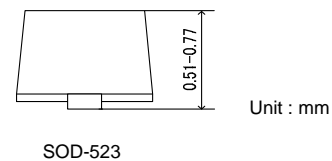
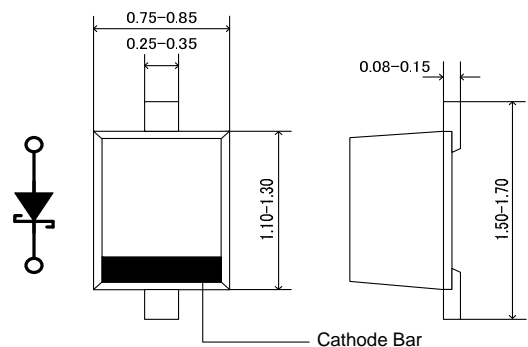
PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Voltage	$V_{RM}$	40	V
Reverse Voltage (DC)	$V_R$	40	V
Forward Current (Average)	$I_{F(AV)}$	200	mA
Non Continuous Forward Surge Current <sup>*1</sup>	$I_{FSM}$	1	A
Junction Temperature	$T_J$	125	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55~+150	$^\circ C$

\*1 : Non continuous high amplitude 60Hz half-sine wave.

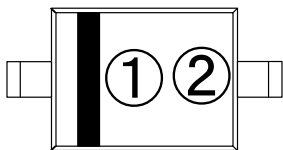
## APPLICATIONS

- Low Current Rectification

## PACKAGING INFORMATION



## MARKING RULE



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

## PRODUCT NAME

PRODUCT NAME	DEVICE ORIENTATION
XBS024S15R	SOD-523
XBS024S15R-G	SOD-523(Halogen & Antimony free)

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

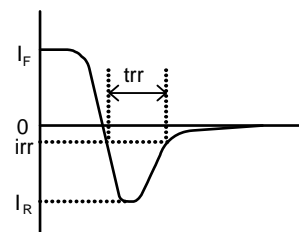
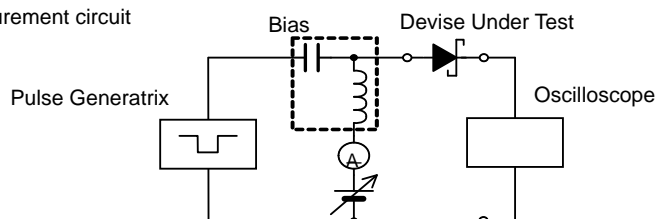
\* The device orientation is fixed in its embossed tape pocket.

## ELECTRICAL CHARACTERISTICS

$T_a=25^\circ C$

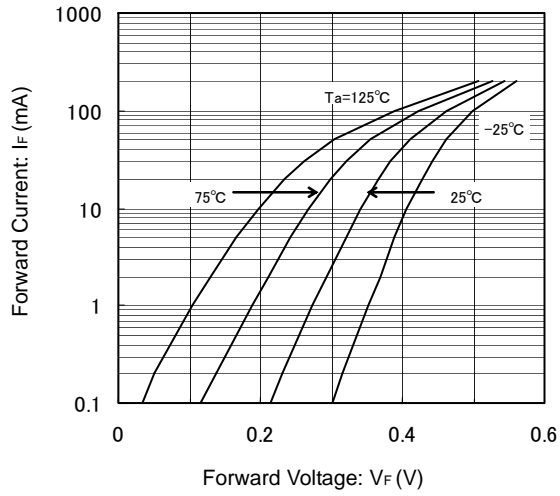
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Forward Voltage	$V_{F1}$	$I_F=10mA$	-	0.33	-	V
	$V_{F2}$	$I_F=200mA$	-	0.53	0.6	V
Reverse Current	$I_R$	$V_R=40V$	-	-	2	$\mu A$
Inter-Terminal Capacity	$C_t$	$V_R=10V, f=1MHz$	-	5	-	pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=10mA, irr=1mA$	-	4	-	ns

\* :  $t_{rr}$  measurement circuit

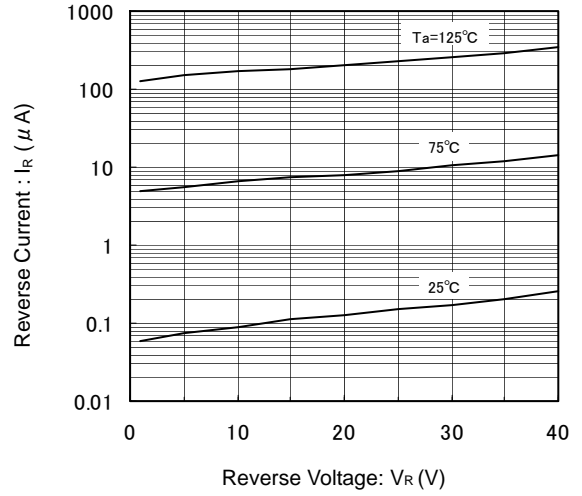


## TYPICAL PERFORMANCE CHARACTERISTICS

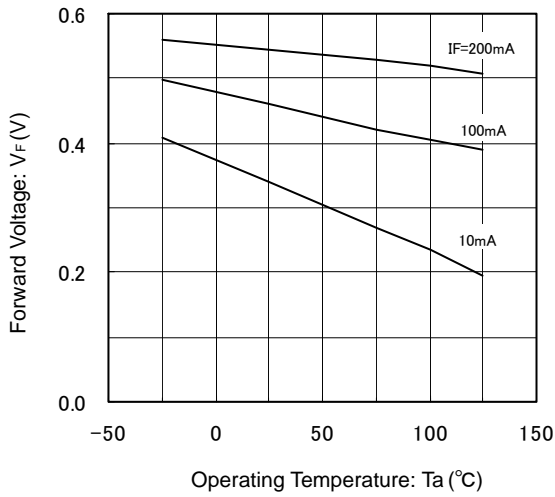
(1) Forward Current vs. Forward Voltage



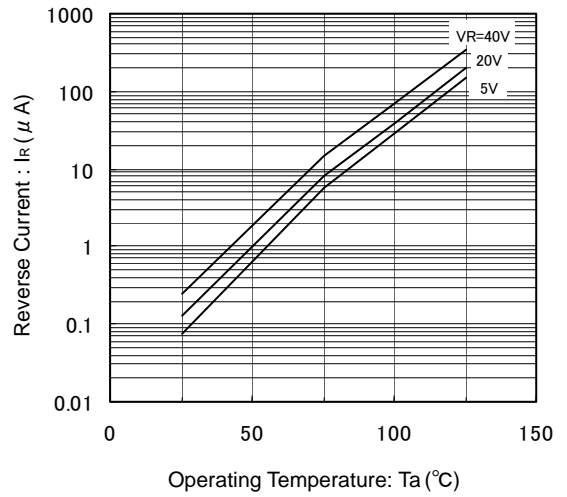
(2) Reverse Current vs. Reverse Voltage



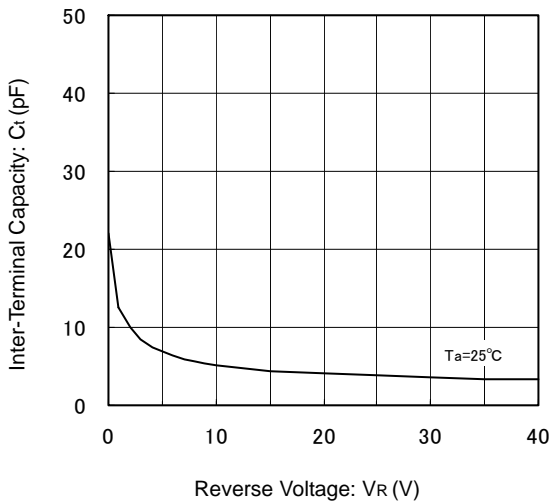
(3) Forward Voltage vs. Operating Temperature



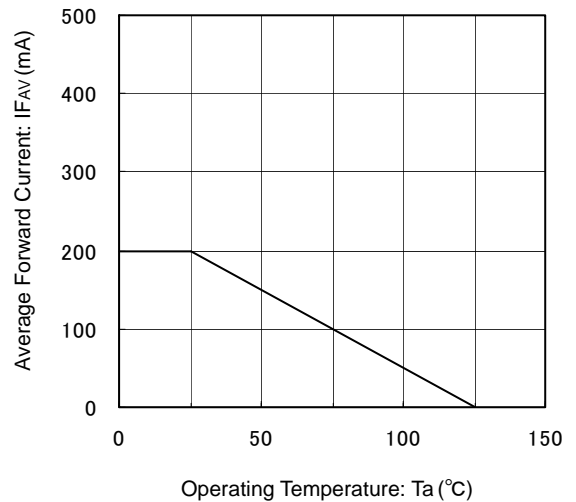
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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