

# XBS013S16R-G

Schottky Barrier Diode, 100mA, 30V Type

## FEATURES

Forward Voltage	: $V_F=0.71V$ (TYP.)
Forward Current	: $I_{F(AV)}=100mA$
Repetitive Peak Reverse Voltage	: $V_{RM}=30V$
Environmentally Friendly	: EU RoHS Compliant, Pb Free

## APPLICATIONS

- Low Current Rectification

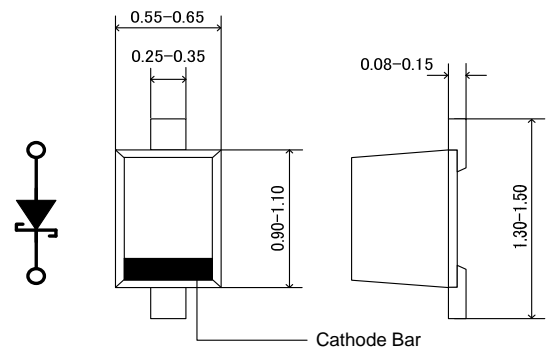
## ABSOLUTE MAXIMUM RATINGS

$T_a=25^\circ C$

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Voltage	$V_{RM}$	30	V
Reverse Voltage(DC)	$V_R$	30	V
Forward Current(Average)	$I_{F(AV)}$	100	mA
Non Continuous Forward Surge Current*1	$I_{FSM}$	0.6	A
Junction Temperature	$T_J$	125	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55~+150	$^\circ C$

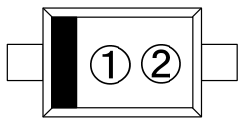
\*1 : Non continuous high amplitude 60Hz half-sine wave.

## PACKAGING INFORMATION



SOD-723

## MARKING RULE



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

## PRODUCT NAME

PRODUCT NAME	DESCRIPTION
XBS013S16R	SOD-723
XBS013S16R-G	SOD-723 (Halogen & Antimony free)

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

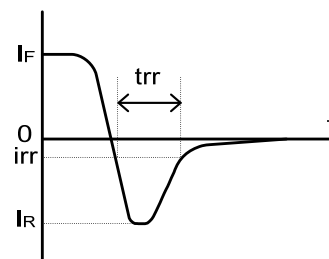
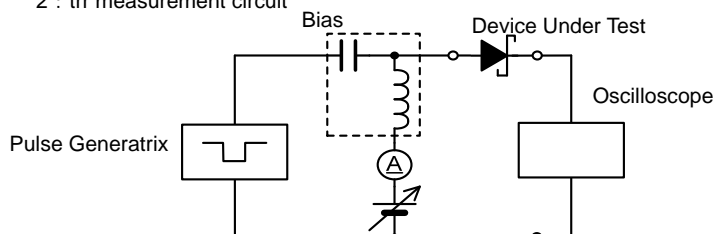
\* The device orientation is fixed in its embossed tape pocket.

## ELECTRICAL CHARACTERISTICS

$T_a=25^\circ C$

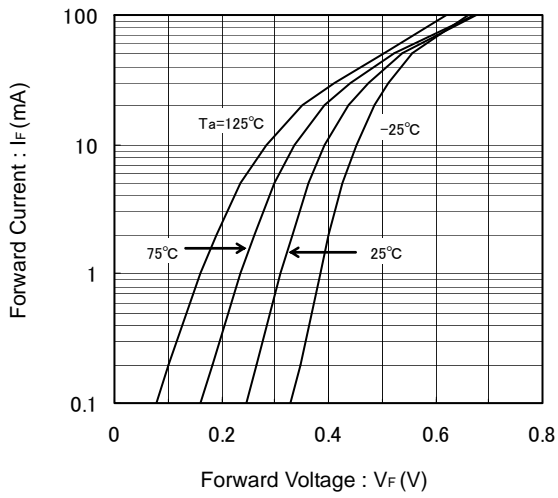
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Forward Voltage	$V_{F1}$	$I_F=1mA$	-	0.31	-	V
	$V_{F2}$	$I_F=100mA$	-	0.71	1	V
Reverse Current	$I_R$	$V_R=25V$	-	-	2	$\mu A$
Inter-Terminal Capacity	$C_t$	$V_R=0V, f=1MHz$	-	6	-	pF
Reverse Recovery Time*2	$t_{rr}$	$I_F=I_R=10mA, irr=1mA$	-	2	-	ns

\*2 :  $t_{rr}$  measurement circuit

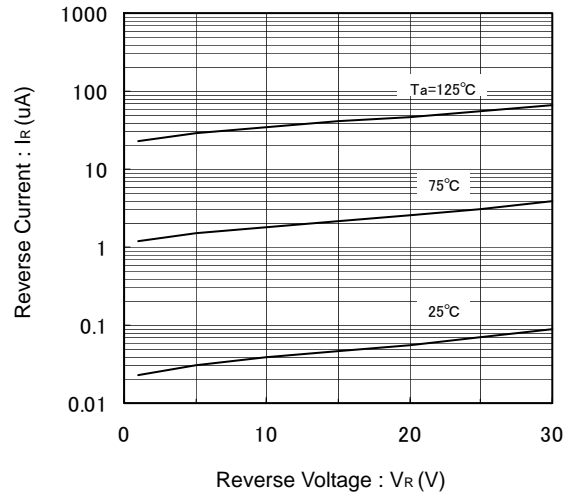


## TYPICAL PERFORMANCE CHARACTERISTICS

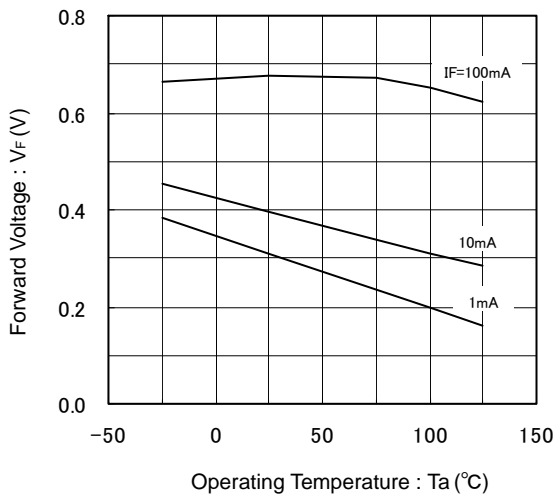
(1) Forward Current vs. Forward Voltage



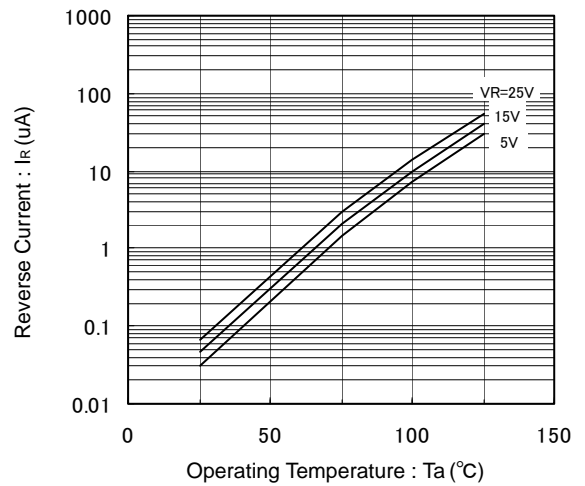
(2) Reverse Current vs. Reverse Voltage



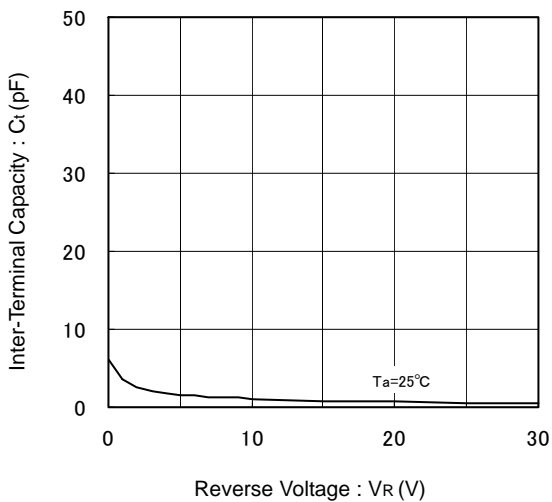
(3) Forward Voltage vs. Operating Temperature



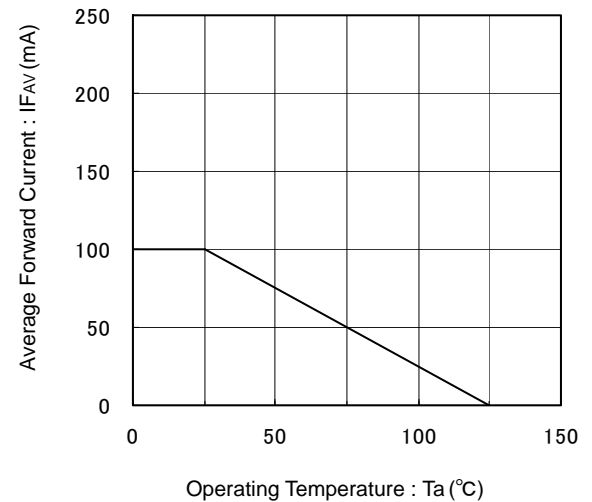
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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