

XBS013S15R-G

ETR16003-004

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

ABSOLUTE MAXIMUM RATING

Ta=25°C

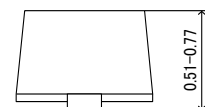
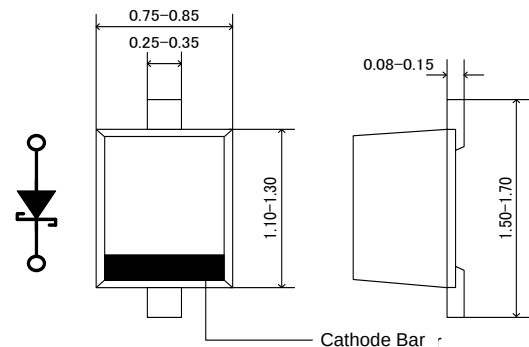
PARAMETER	SYMBOL	RATINGS	UNITS
Repetitive Peak Reverse Voltage	V_{RM}	30	V
Reverse Voltage (DC)	V_R	30	V
Forward Current (Average)	$I_{F(AV)}$	100	mA
Non Continuous Forward Surge Current*1	I_{FSM}	0.6	A
Junction Temperature	T_J	125	°C
Storage Temperature Range	T_{stg}	-55~+150	°C

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

APPLICATIONS

● Low Current Rectification

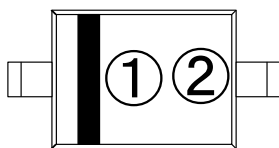
PACKAGING INFORMATION



SOD-523

Unit : mm

MARKING RULE



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

PRODUCT NAME

PRODUCT NAME	DESCRIPTION
XBS013S15R	SOD-523
XBS013S15R-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.

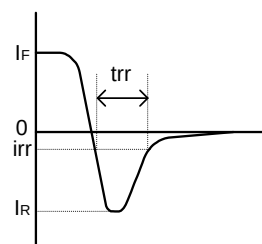
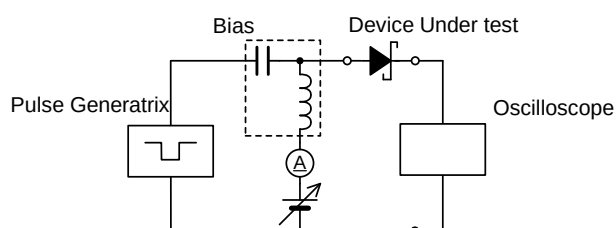
* The device orientation is fixed in its embossed tape pocket.

ELECTRICAL CHARACTERISTICS

Ta=25°C

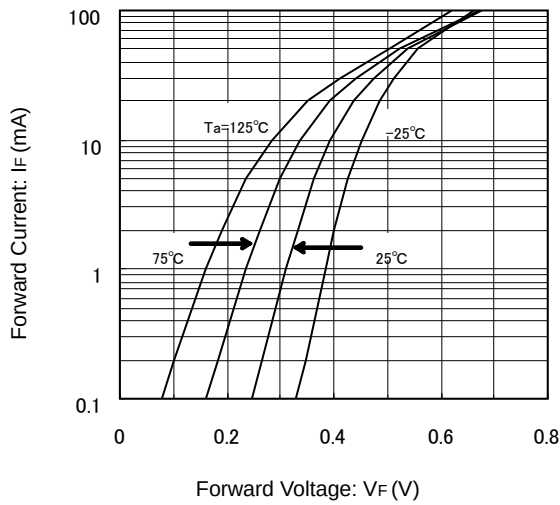
PARAMETER	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_{F1}	$I_F=1mA$	-	0.31	-	V
	V_{F2}	$I_F=100mA$	-	0.71	1	V
Reverse Current	I_R	$V_R=25V$	-	-	2	μA
Inter-Terminal Capacity	C_t	$V_R=0V, f=1MHz$	-	6	-	pF
Reverse Recovery Time*2	t_{rr}	$I_F=I_R=10mA, irr=1mA$	-	2	-	ns

*2 : t_{rr} measurement circuit

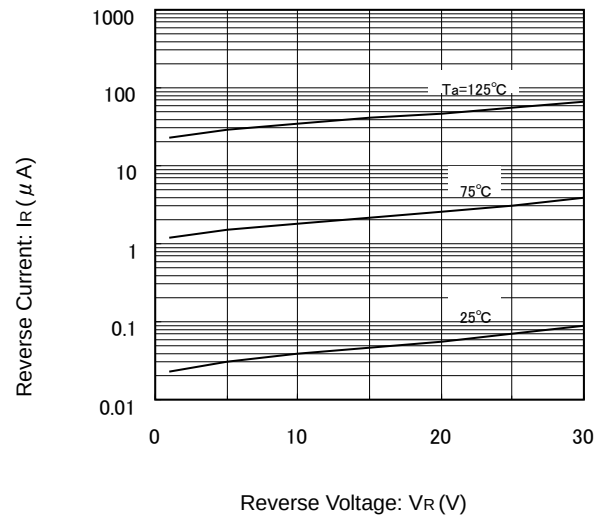


TYPICAL PERFORMANCE CHARACTERISTICS

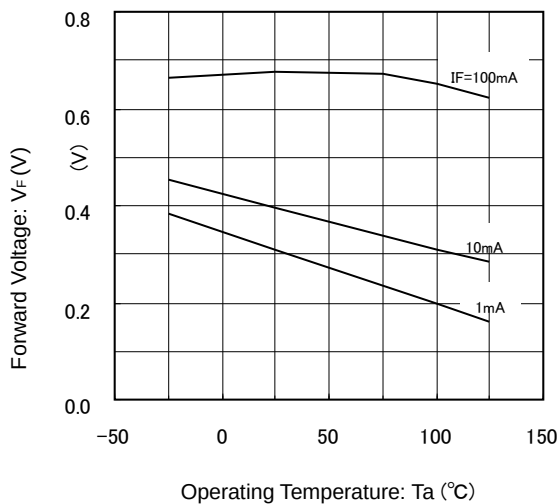
(1) Forward Current vs. Forward Voltage



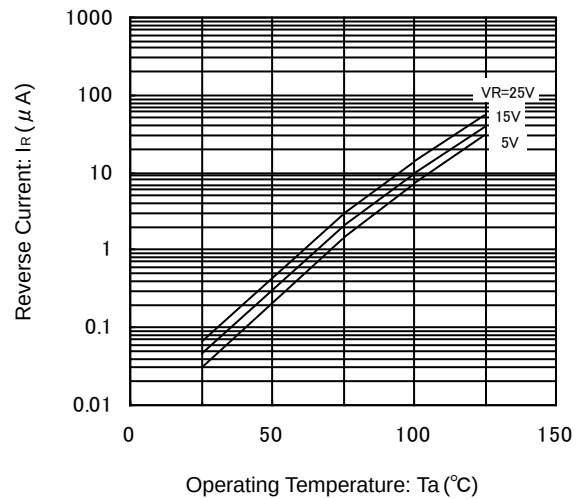
(2) Reverse Current vs. Reverse Voltage



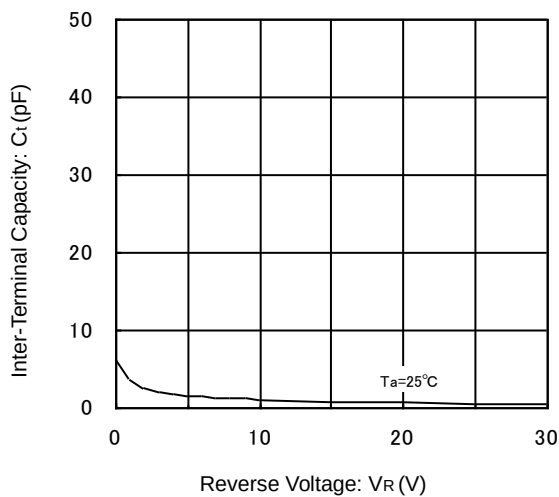
(3) Forward Voltage vs. Operating Temperature



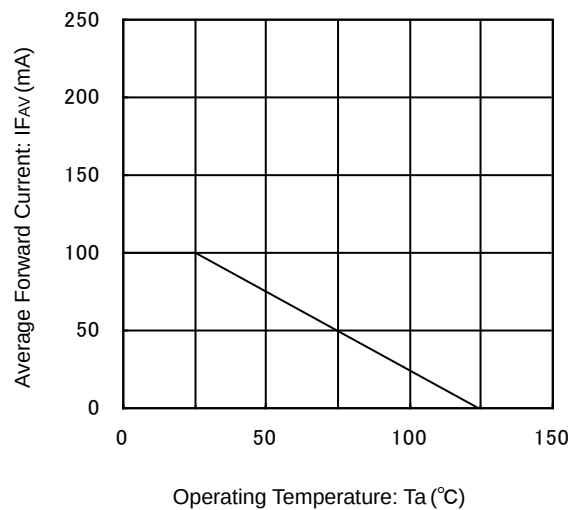
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



■ PACKAGING INFORMATION

For the latest package information go to, www.torexsemi.com/technical-support/packages

PACKAGE	OUTLINE / LAND PATTERN	THERMAL CHARACTERISTICS
SOD-523	SOD-523 PKG	

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