XBS013S16R-G

TOREX

ETR1604-003

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

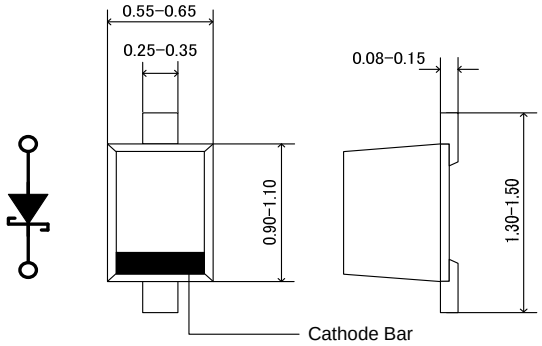
■ABSOLUTE MAXIMUM RATINGS

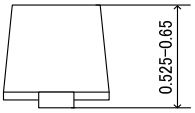
Ta=25℃

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	Tj	125	℃
Storage Temperature Range	Tstg	-55～+150	℃

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

■PACKAGING INFORMATION

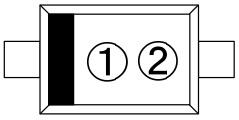




Unit : mm

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)

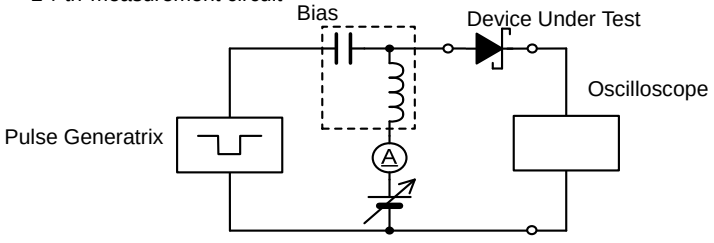
* The “-G” suffix indicates that the products are Halogen and Antimony free as well as being fully RoHS compliant.
* The device orientation is fixed in its embossed tape pocket.

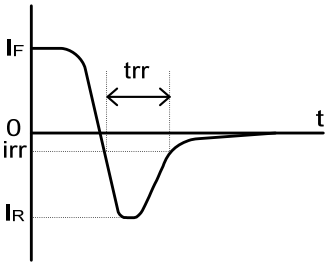
■ELECTRICAL CHARACTERISTICS

Ta=25℃

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	μA
Inter-Terminal Capacity	Ct	V_R=0V , f=1MHz	-	6	-	pF
Reverse Recovery Time*2	trr	I_F=I_R=10mA , irr=1mA	-	2	-	ns

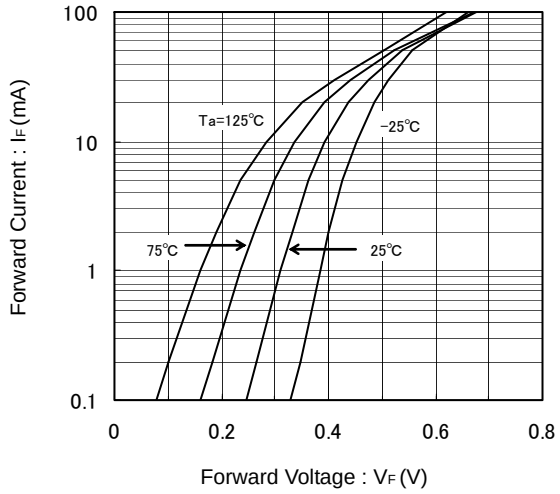
*2：trr measurement circuit



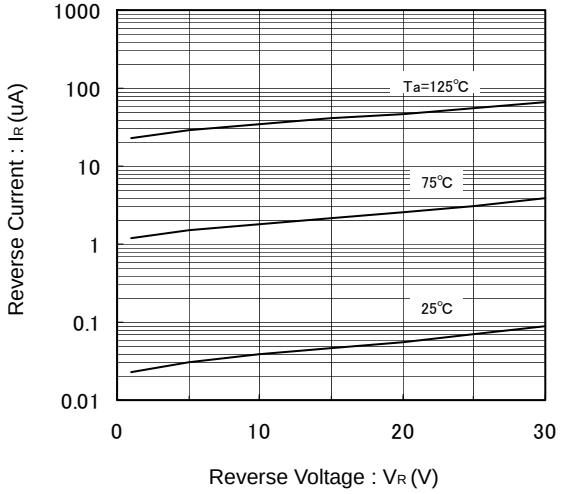


■TYPICAL PERFORMANCE CHARACTERISTICS

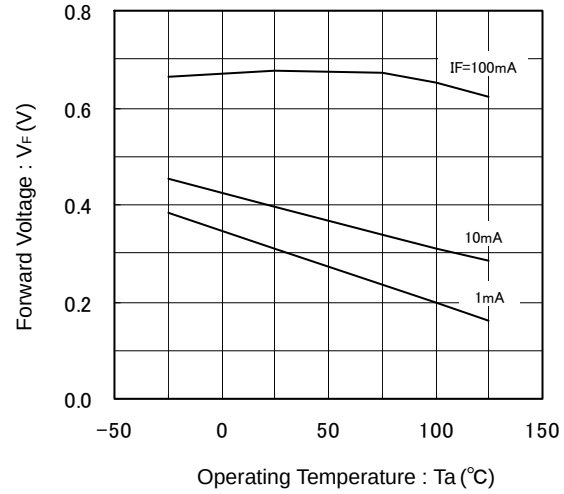
(1) Forward Current vs. Forward Voltage



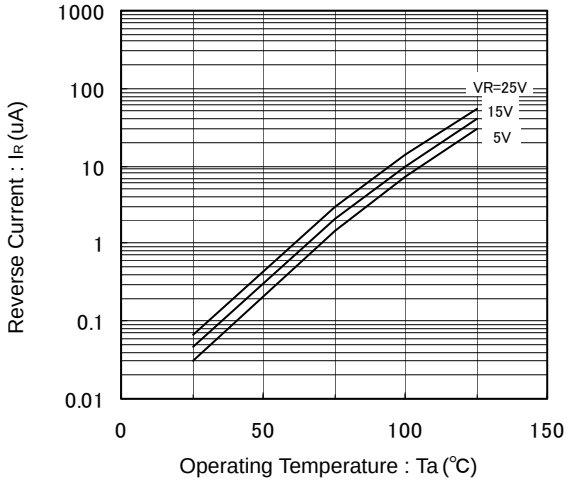
(2) Reverse Current vs. Reverse Voltage



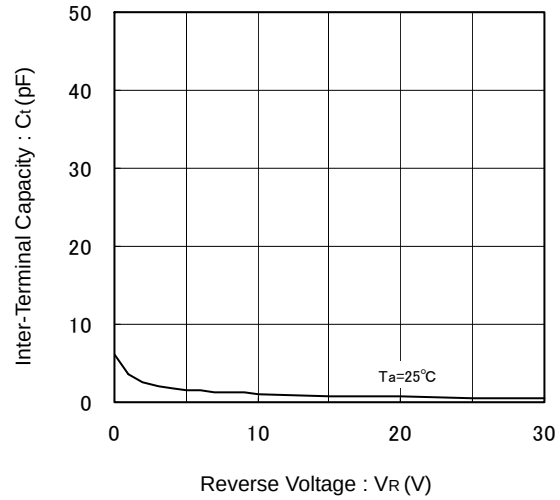
(3) Forward Voltage vs. Operating Temperature



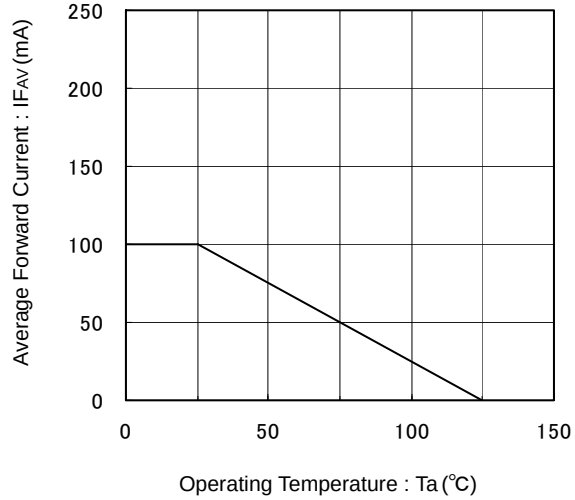
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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