

XBS104S13R-G

TOIREX

ETR1608-003

Schottky Barrier Diode, 1A, 40V Type

FEATURES

Forward Voltage : $V_F=0.49V$ (TYP.)

Forward Current : $I_{F(AV)}=1A$

Repetitive Peak Reverse Voltage : $V_{RM}=40V$

Environmentally Friendly : EU RoHS Compliant, Pb Free

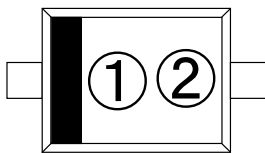
ABSOLUTE MAXIMUM RATINGS

$T_a=25^\circ C$

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	V_{RM}	40	V
Reverse Voltage (DC)	V_R	40	V
Forward Current (Average)	$I_{F(AV)}$	1	A
Non Continuous Forward Surge Current ^{*1}	I_{FSM}	10	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.

MARKING RULE



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

PRODUCT NAME

PRODUCT NAME	DEVICE ORIENTATION
XBS104S13R-G	SOD-323A (Halogen & Antimony free)
XBS104S13R	SOD-323A

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

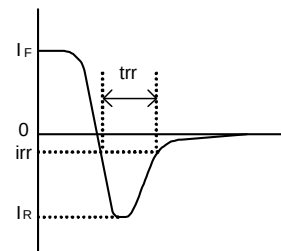
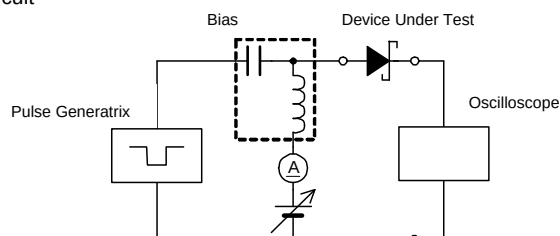
* The device orientation is fixed in its embossed tape pocket.

ELECTRICAL CHARACTERISTICS

$T_a=25^\circ C$

PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Forward Voltage	V_{F1}	$I_F=100mA$	-	0.34	-	V
	V_{F2}	$I_F=1A$	-	0.49	0.54	V
Reverse Current	I_R	$V_R=40V$	-	4	200	μA
Inter-Terminal Capacity	C_t	$V_R=10V, f=1MHz$	-	35	-	pF
Reverse Recovery Time ^{*2}	t_{rr}	$I_F=I_R=10mA, i_{rr}=1mA, R_L=100\Omega$	-	25	-	ns

*2 : t_{rr} measurement circuit

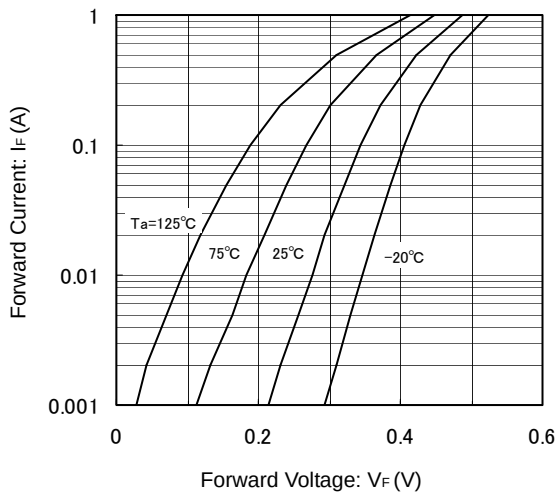


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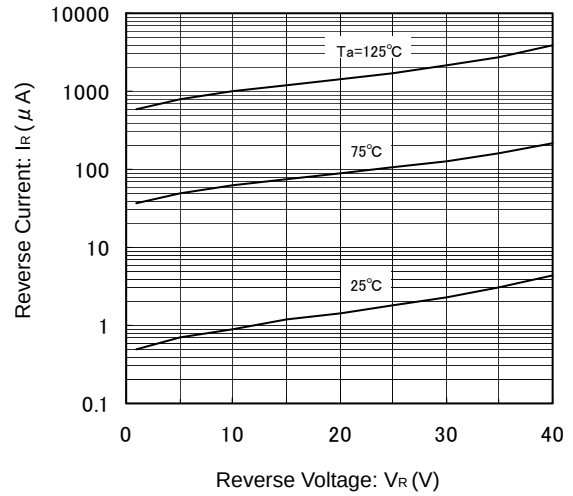
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TYPICAL PERFORMANCE CHARACTERISTICS

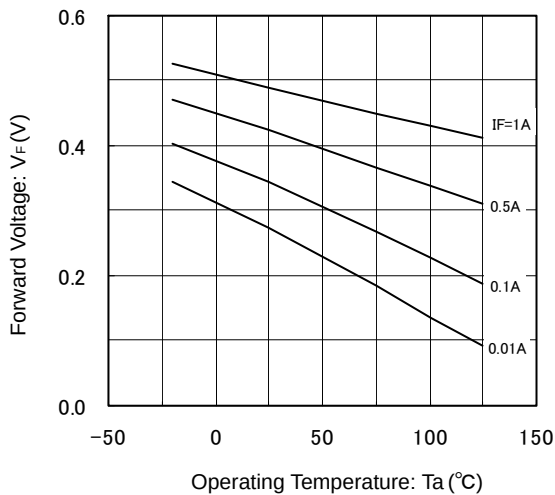
(1) Forward Current vs. Forward Voltage



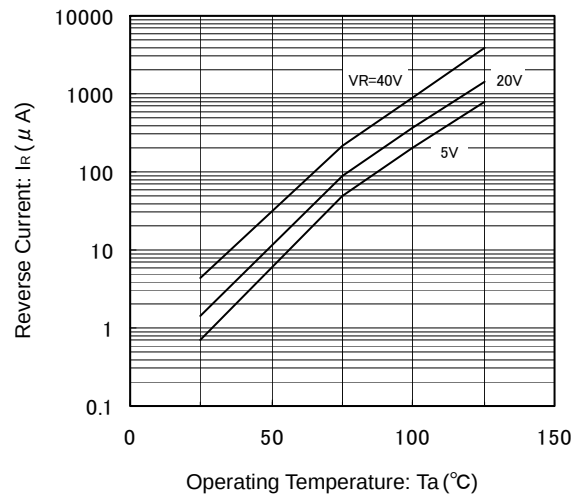
(2) Reverse Current vs. Reverse Voltage



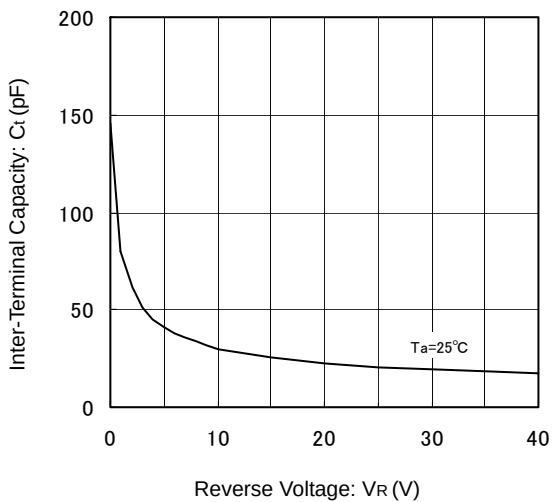
(3) Forward Voltage vs. Operating Temperature



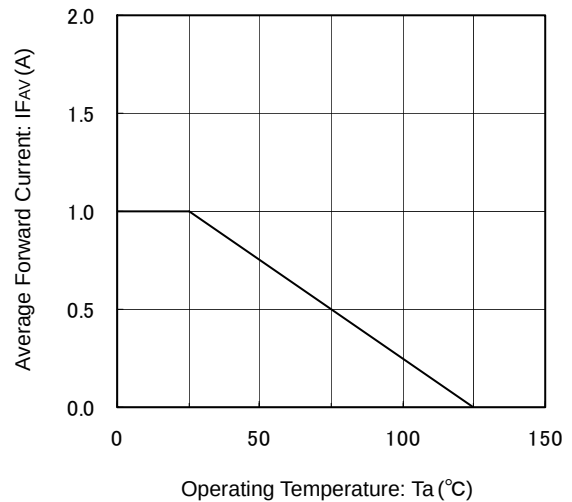
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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