

XBS104S13R-G

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

APPLICATIONS

- Rectification
- Protection against reverse connection of battery

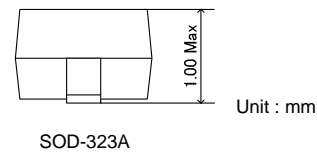
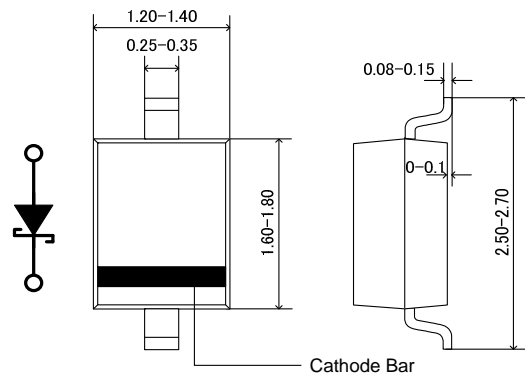
ABSOLUTE MAXIMUM RATINGS

Ta=25°C

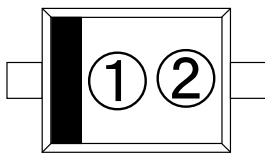
PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	V _{RM}	40	V
Reverse Voltage (DC)	V _R	40	V
Forward Current (Average)	I _{F(AV)}	1	A
Non Continuous Forward Surge Current *1	I _{FSM}	10	A
Junction Temperature	T _J	125	°C
Storage Temperature Range	T _{stg}	-55~+150	°C

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

PACKAGING INFORMATION



MARKING RULE



- ①: 1 (Product Number)
- ②: 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.

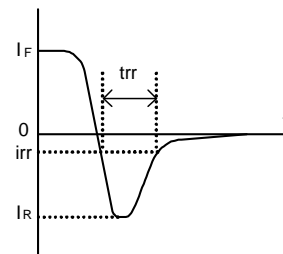
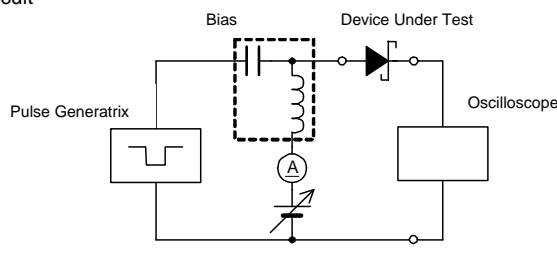
* The device orientation is fixed in its embossed tape pocket.

ELECTRICAL CHARACTERISTICS

Ta=25°C

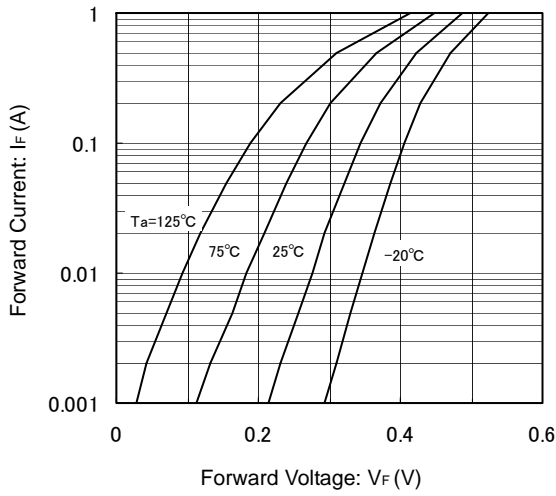
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Forward Voltage	V _{F1}	I _F =100mA	-	0.34	-	V
	V _{F2}	I _F =1A	-	0.49	0.54	V
Reverse Current	I _R	V _R =40V	-	4	200	μA
Inter-Terminal Capacity	C _t	V _R =10V, f=1MHz	-	35	-	pF
Reverse Recovery Time *2	t _{rr}	I _F =I _R =10mA, i _{rr} =1mA, R _L =100Ω	-	25	-	ns

*2 : t_{rr} measurement circuit

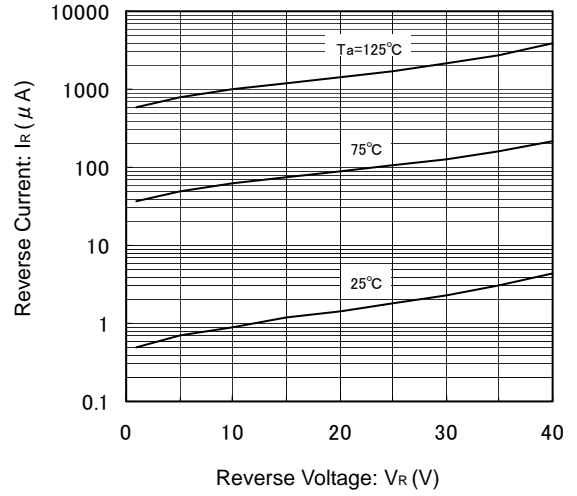


TYPICAL PERFORMANCE CHARACTERISTICS

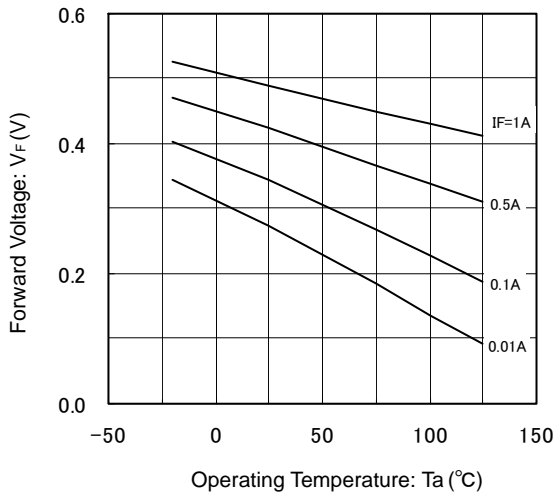
(1) Forward Current vs. Forward Voltage



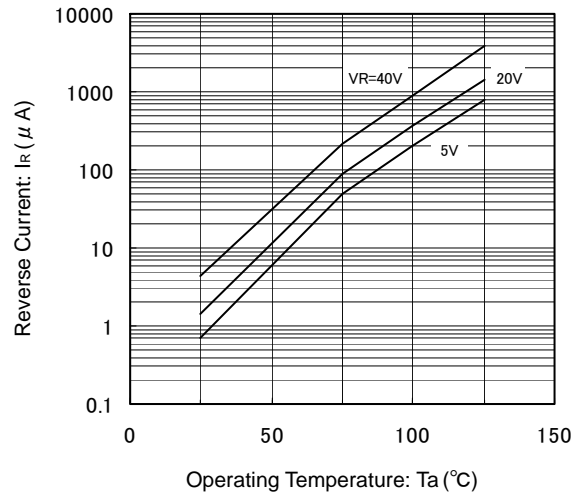
(2) Reverse Current vs. Reverse Voltage



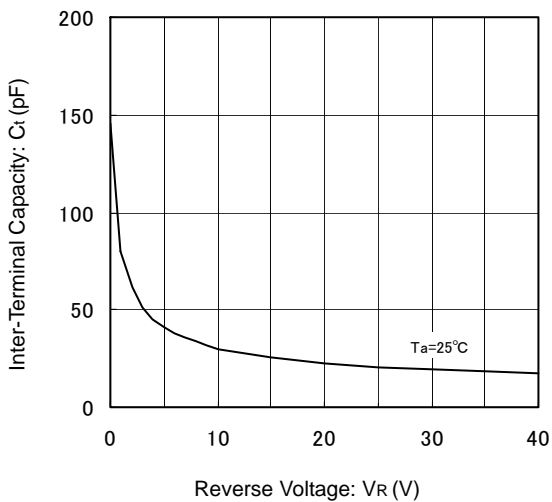
(3) Forward Voltage vs. Operating Temperature



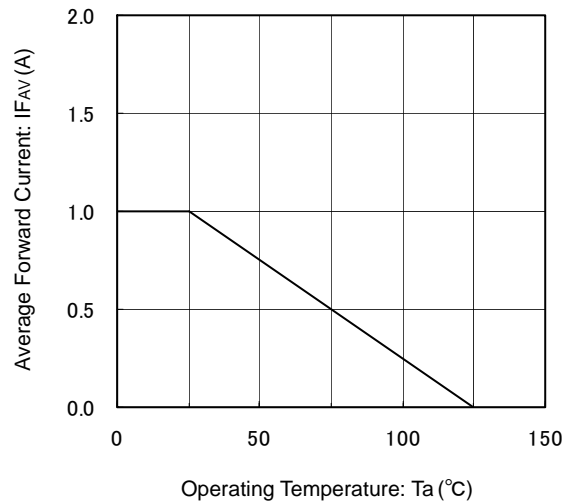
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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