

# 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

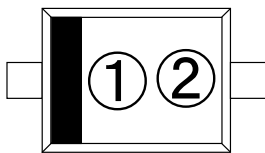
### ABSOLUTE MAXIMUM RATINGS

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.

### MARKING RULE

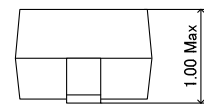
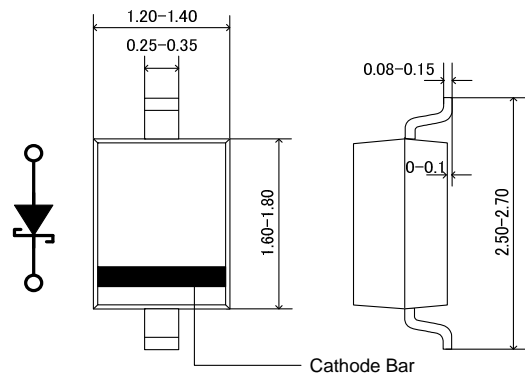


- ①: 1 (Product Number)
- ②: Assembly Lot Number

### APPLICATIONS

- Rectification
- Protection against reverse connection of battery

### PACKAGING INFORMATION



Unit : mm

SOD-323A

### 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.

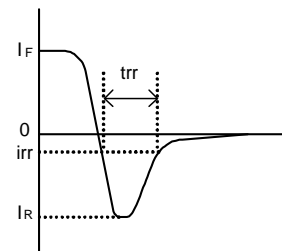
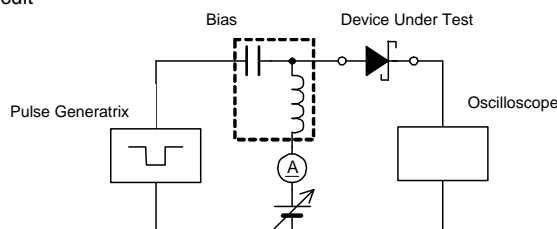
\* The device orientation is fixed in its embossed tape pocket.

### ELECTRICAL CHARACTERISTICS

Ta=25°C

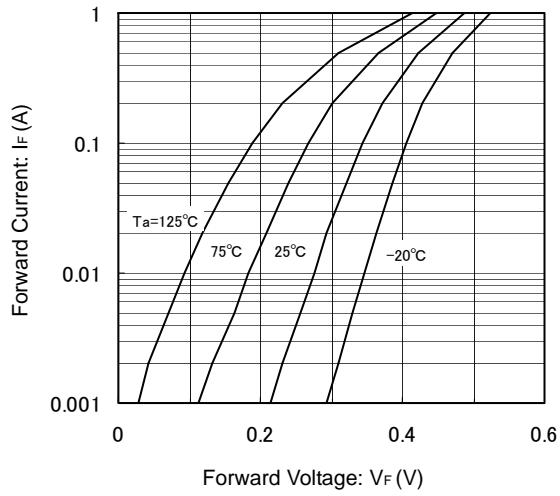
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Forward Voltage	$V_{F1}$	$I_F=100mA$	-	0.34	-	V
	$V_{F2}$	$I_F=1A$	-	0.49	0.54	V
Reverse Current	$I_R$	$V_R=40V$	-	4	200	$\mu A$
Inter-Terminal Capacity	$C_t$	$V_R=10V, f=1MHz$	-	35	-	pF
Reverse Recovery Time *2	$t_{rr}$	$I_F=I_R=10mA,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

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

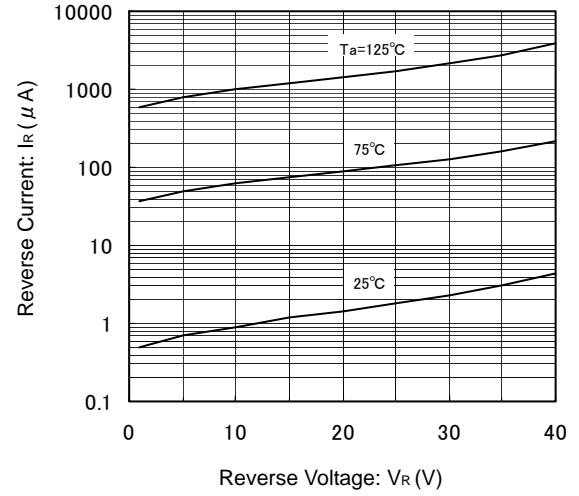


## TYPICAL PERFORMANCE CHARACTERISTICS

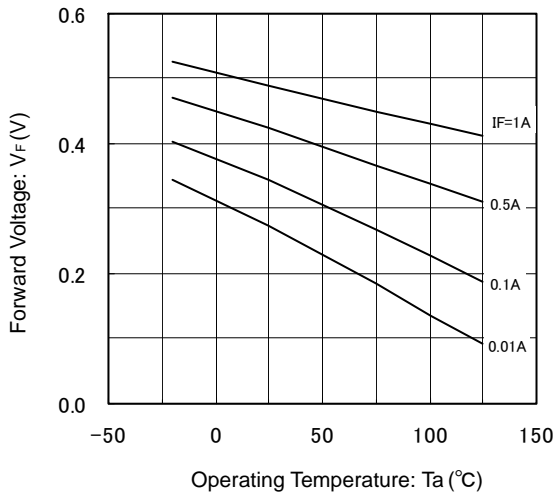
(1) Forward Current vs. Forward Voltage



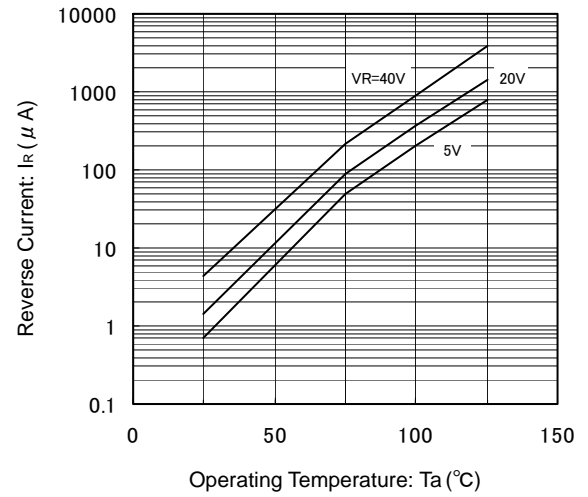
(2) Reverse Current vs. Reverse Voltage



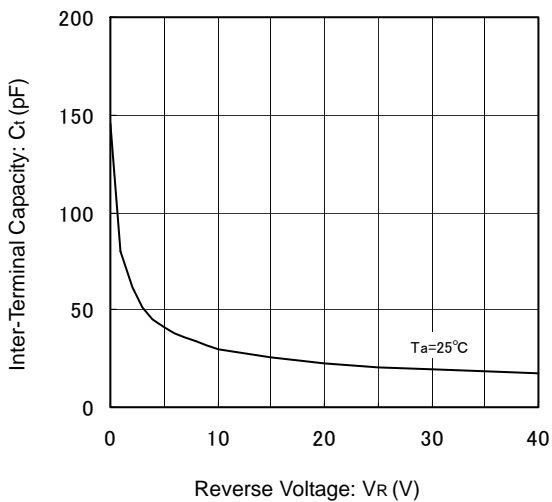
(3) Forward Voltage vs. Operating Temperature



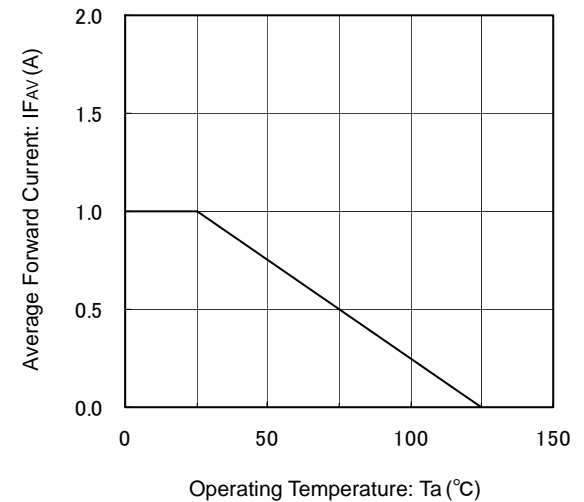
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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