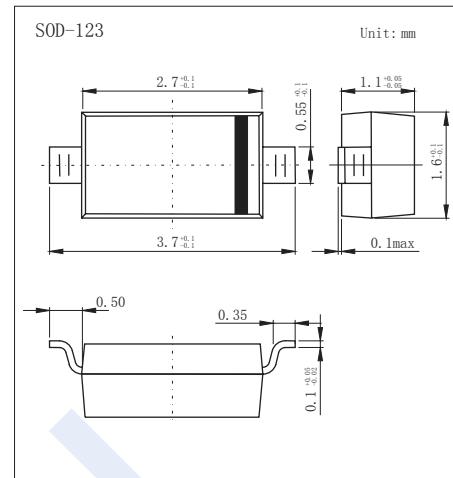
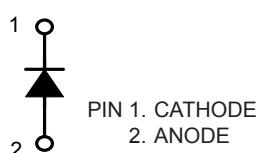


## Schottky Barrier Diodes

### XBS104V

#### ■ Features

- Forward Voltage :  $V_F=0.365V$  (TYP.)
- Forward Current :  $I_F(AV)=1A$
- Repetitive Peak Reverse Voltage :  $V_{RM}=40V$



#### ■ Absolute Maximum Ratings $T_a = 25^\circ C$

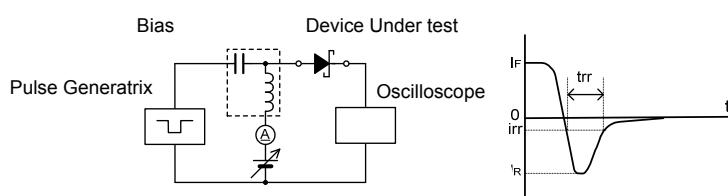
Parameter	Symbol	Rating	Unit
Non-Repetitive Peak reverse voltage	$V_{RM}$	40	V
DC Blocking Voltage	$V_R$	40	
DC Forward Current	$I_F(AV)$	1	A
Peak forward surge current (Note.1)	$I_{FSM}$	20	
Junction Temperature	$T_J$	125	$^\circ C$
Storage temperature range	$T_{stg}$	-55 to 150	

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

#### ■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{RM}$	$I_R = 100 \mu A$	40			V
Forward voltage	$V_F$	$I_F = 100m A$		230	315	mV
		$I_F = 500mA$		300	385	
		$I_F = 1 A$		365	410	
Reverse voltage leakage current	$I_R$	$V_R = 40 V$		0.25	2	mA
Junction capacitance	$C_J$	$V_R = 1V, f = 1 MHz$		150		pF
Reverse Recovery Time (Note.2)	$t_{rr}$	$I_F = I_R = 10mA, I_{rr} = 1mA$		41		ns

Note.2:  $t_{rr}$  measurement circuit.



#### ■ Marking

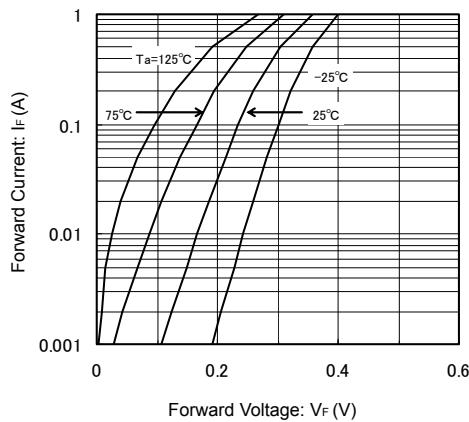
Marking	SL
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## Schottky Barrier Diodes

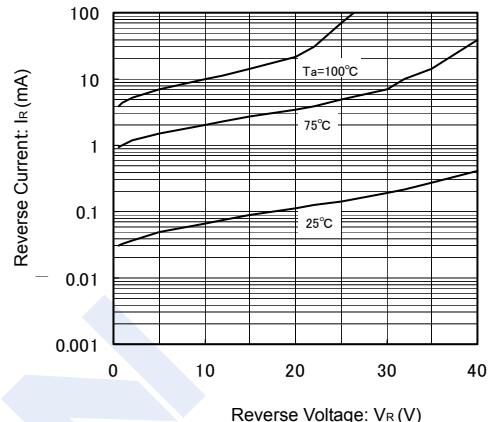
### XBS104V

#### ■ Typical Characteristics

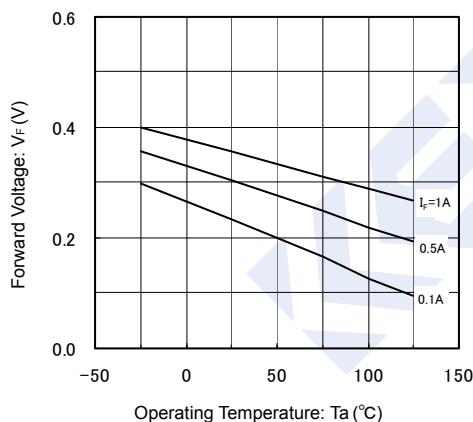
(1) Forward Current vs. Forward Voltage



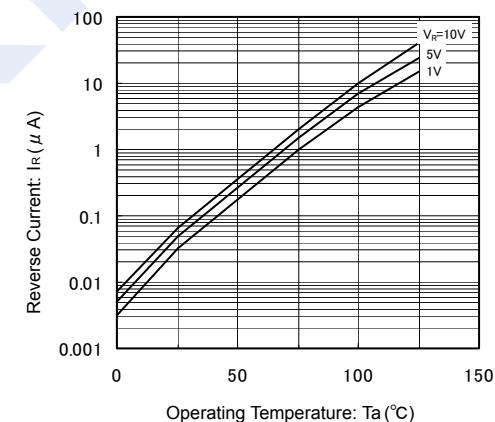
(2) Reverse Current vs. Reverse Voltage



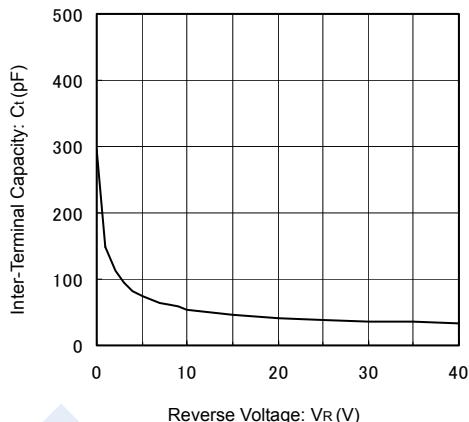
(3) Forward Voltage vs. Operating Temperature



(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature

