

Schottky Barrier Diode, 1A, 40V, SOD-123A Package

FEATURES

Forward Voltage	: $V_F=0.49V$ (TYP.)
Forward Current	: $I_{F(AV)}=1A$
Repetitive Peak Reverse Voltage	: $V_{RM}=40V$

APPLICATIONS

- Rectification
- Protection against reverse connection of battery

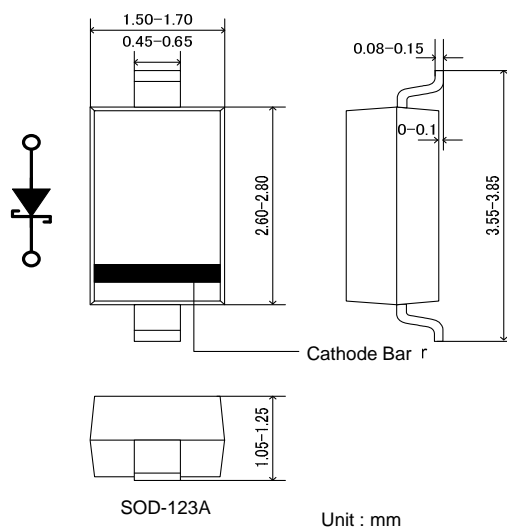
ABSOLUTE MAXIMUM RATINGS

$T_a=25^\circ C$

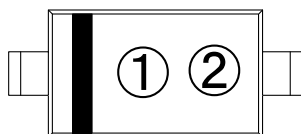
PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	V_{RM}	40	V
Reverse Voltage (DC)	V_R	40	V
Forward Current (Average)	$I_{F(AV)}$	1	A
Non Continuous Forward Surge Current *1	I_{FSM}	10	A
Junction Temperature	T_J	125	$^\circ C$
Storage Temperature Range	T_{stg}	-55~+150	$^\circ C$

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

PACKAGING INFORMATION



MARKING RULE



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

PRODUCT NAME

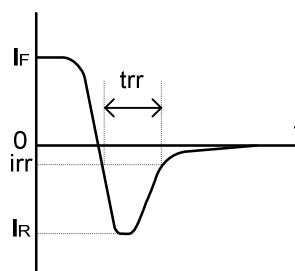
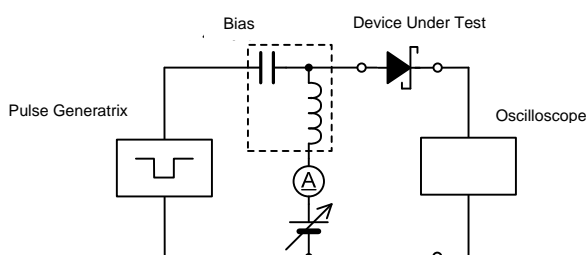
PRODUCT NAME	DESCRIPTION
XBS104S14R	SOD-123A
XBS104S14R-G	SOD-123A (Halogen & Antimony free)

ELECTRICAL CHARACTERISTICS

$T_a=25^\circ C$

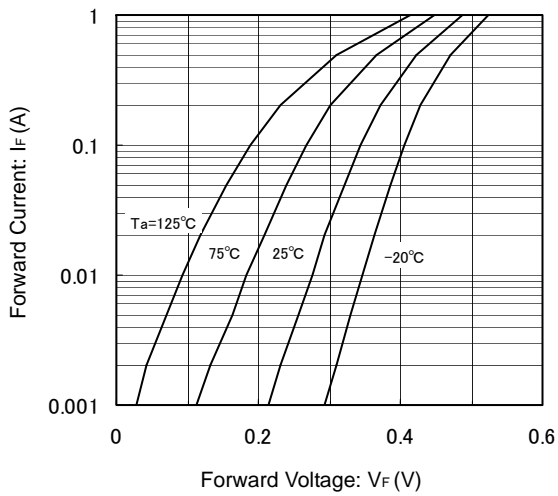
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Forward Voltage	V_{F1}	$I_F=100mA$	-	0.34	-	V
	V_{F2}	$I_F=1A$	-	0.49	0.54	V
Reverse Current	I_R	$V_R=40V$	-	4	200	μA
Inter-Terminal Capacity	C_t	$V_R=10V$, $f=1MHz$	-	35	-	pF
Reverse Recovery Time *2	t_{rr}	$I_F=I_R=10mA$, $i_{rr}=1mA$,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

*2 : t_{rr} measurement circuit

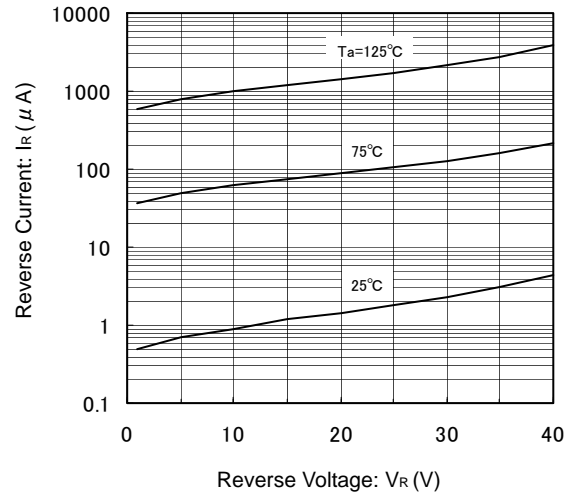


TYPICAL PERFORMANCE CHARACTERISTICS

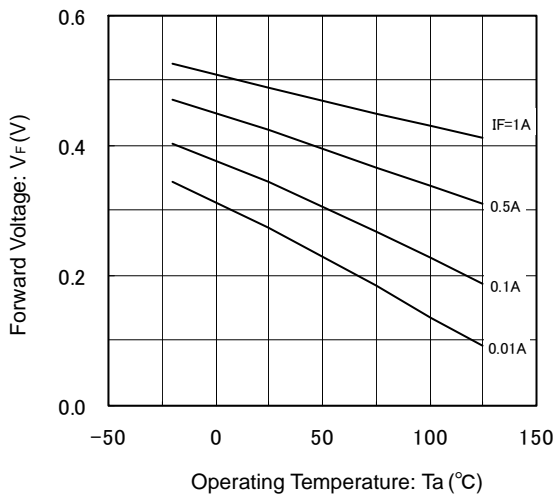
(1) Forward Current vs. Forward Voltage



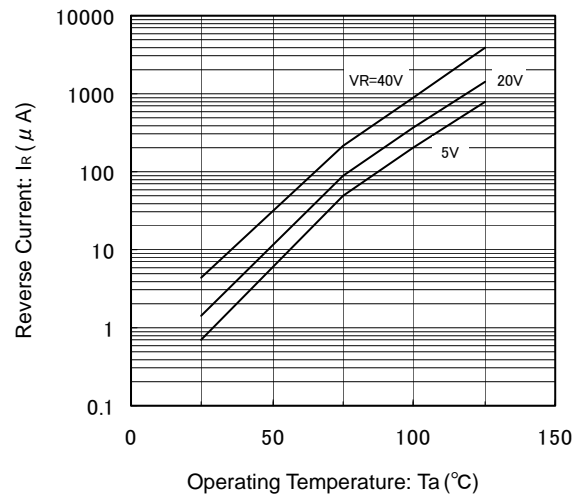
(2) Reverse Current vs. Reverse Voltage



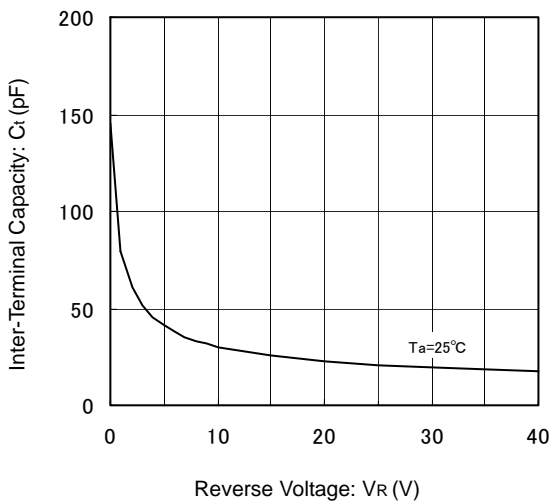
(3) Forward Voltage vs. Operating Temperature



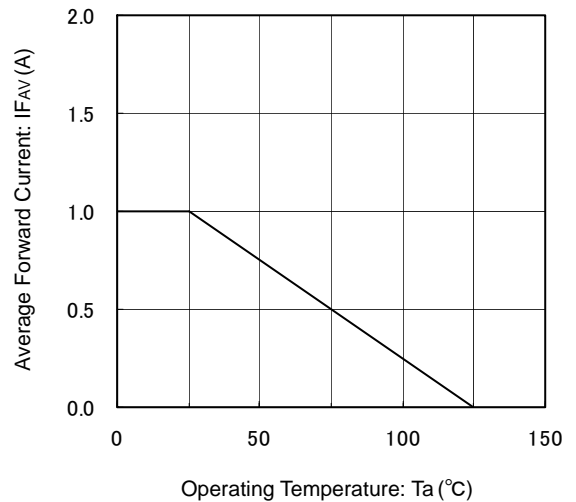
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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