

Schottky Barrier Diode, 100mA, 30V Type

FEATURES

Forward Voltage	: $V_F=0.71V$ (TYP.)
Forward Current	: $I_{F(AV)}=100mA$
Repetitive Peak Reverse Voltage	: $V_{RM}=30V$
Environmentally Friendly	: EU RoHS Compliant, Pb Free

APPLICATIONS

- Low Current Rectification

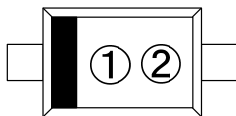
ABSOLUTE MAXIMUM RATINGS

$T_a=25^\circ C$

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Voltage	V_{RM}	30	V
Reverse Voltage(DC)	V_R	30	V
Forward Current(Average)	$I_{F(AV)}$	100	mA
Non Continuous Forward Surge Current*1	I_{FSM}	0.6	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: 0 (Product Number)
- ②: Assembly Lot Number

PRODUCT NAME

PRODUCT NAME	DESCRIPTION
XBS013S16R	SOD-723
XBS013S16R-G	SOD-723 (Halogen & Antimony free)

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

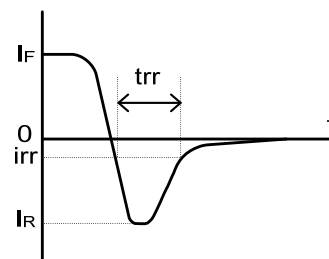
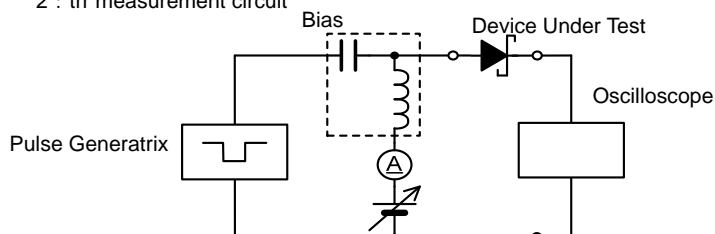
* The device orientation is fixed in its embossed tape pocket.

ELECTRICAL CHARACTERISTICS

$T_a=25^\circ C$

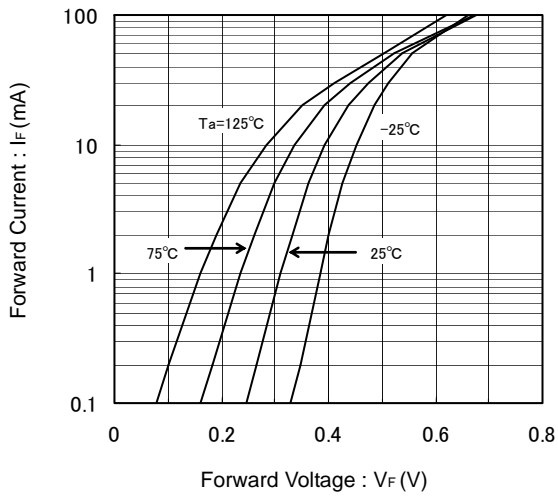
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Forward Voltage	V_{F1}	$I_F=1mA$	-	0.31	-	V
	V_{F2}	$I_F=100mA$	-	0.71	1	V
Reverse Current	I_R	$V_R=25V$	-	-	2	μA
Inter-Terminal Capacity	C_t	$V_R=0V$, $f=1MHz$	-	6	-	pF
Reverse Recovery Time*2	t_{rr}	$I_F=I_R=10mA$, $i_{rr}=1mA$	-	2	-	ns

*2 : t_{rr} measurement circuit

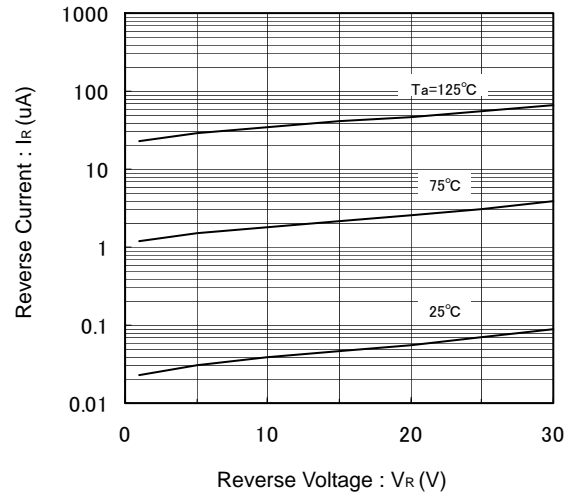


TYPICAL PERFORMANCE CHARACTERISTICS

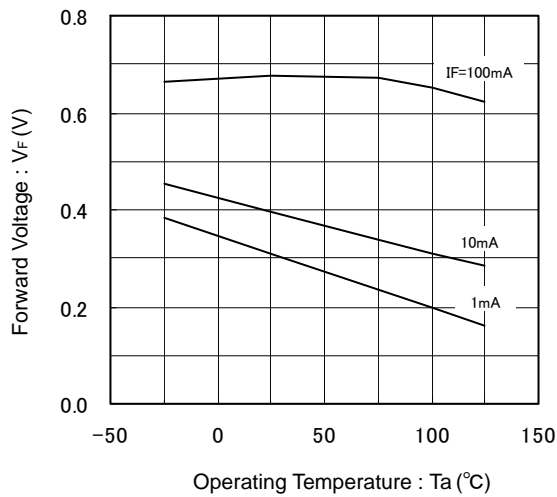
(1) Forward Current vs. Forward Voltage



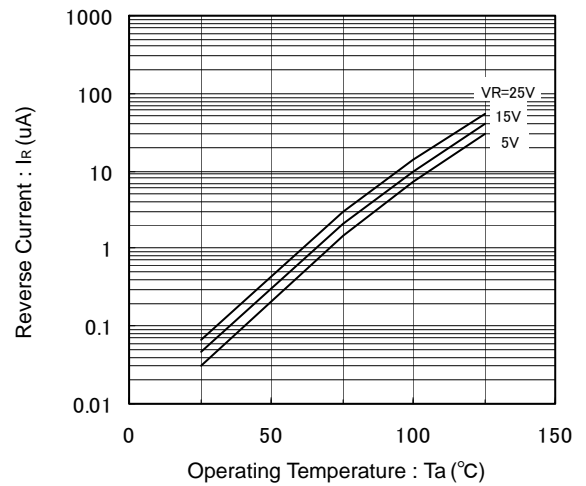
(2) Reverse Current vs. Reverse Voltage



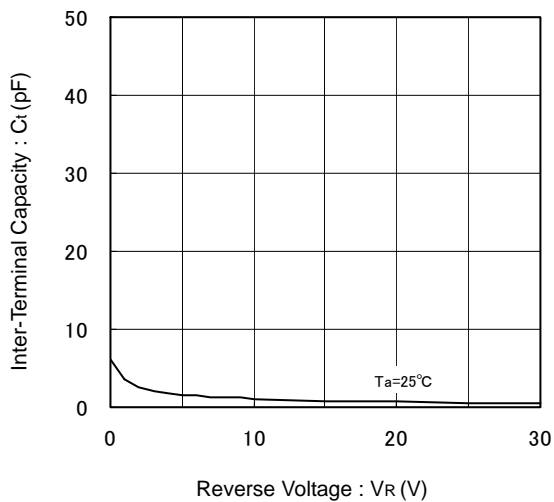
(3) Forward Voltage vs. Operating Temperature



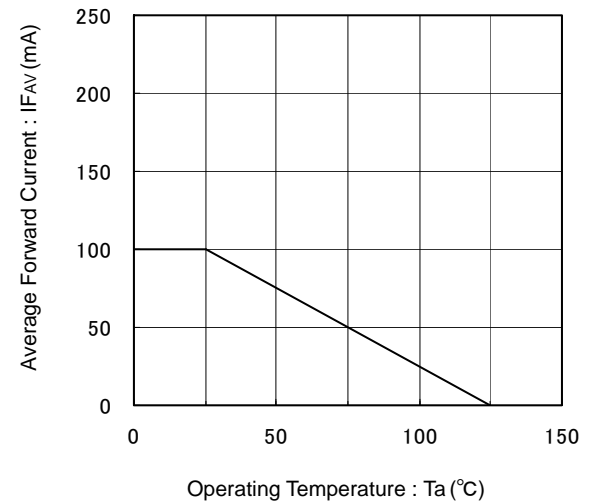
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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