

XBS053V15

Schottky Barrier Diode, 500mA, 30V Type

FEATURES

- Forward Voltage : $V_F=0.40V$ (TYP.)
- Forward Current : $I_{F(AV)}=500mA$
- Repetitive Peak Reverse Voltage : $V_{RM}=30V$

APPLICATIONS

- Rectification
- Protection against reverse connection of battery

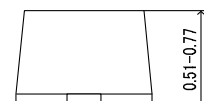
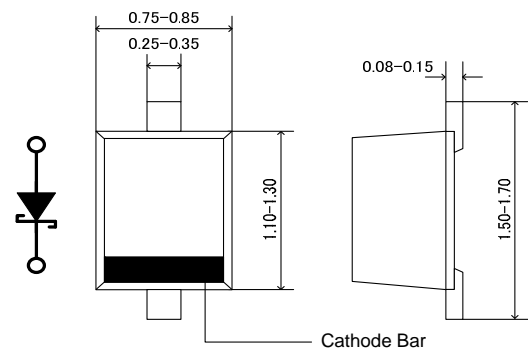
ABSOLUTE MAXIMUM RATINGS

Ta=25

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	VRM	30	V
Reverse Voltage (DC)	VR	20	V
Forward Current (Average)	IF(AV)	500	mA
Non Continuous Forward Surge Current *1	IFSM	5	A
Junction Temperature	Tj	125	
Storage Temperature Range	Tstg	-55 ~ +150	

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

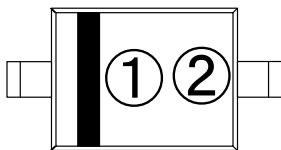
PACKAGING INFORMATION



Unit : mm

SOD-523

MARKING RULE



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

PRODUCT NAME

PRODUCT NAME	DEVICE ORIENTATION
XBS053V15	R : Embossed tape, standard feed

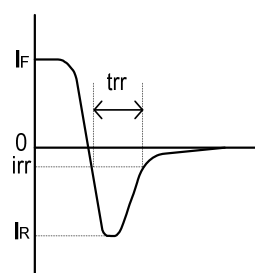
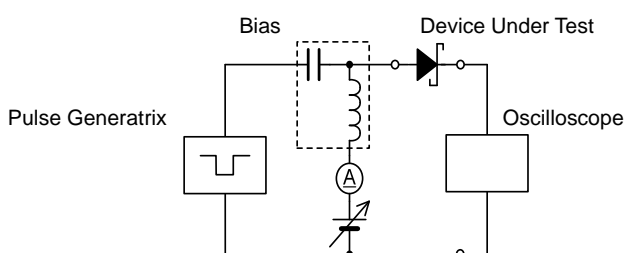
* Please put the device orientation type "R".

ELECTRICAL CHARACTERISTICS

Ta=25

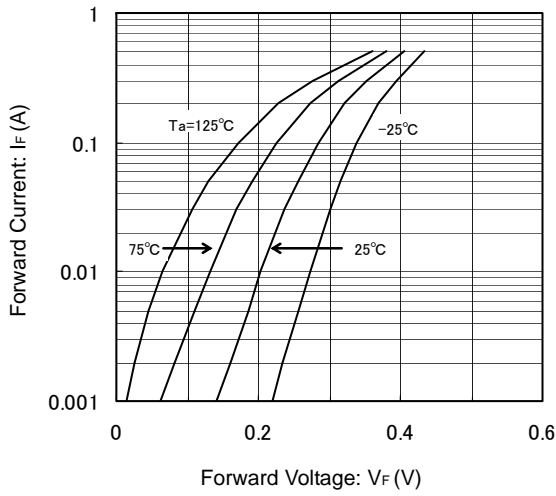
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Forward Voltage	VF1	IF=100mA	-	0.28	-	V
	VF2	IF=500mA	-	0.40	0.47	V
Reverse Current	IR	VR=20V	-	-	100	μA
Inter-Terminal Capacity	Ct	VR=10V, f=1MHz	-	12	-	pF
Reverse Recovery Time *2	trr	IF=IR=10mA, irr=1mA	-	8	-	ns

*2 : trr measurement circuit

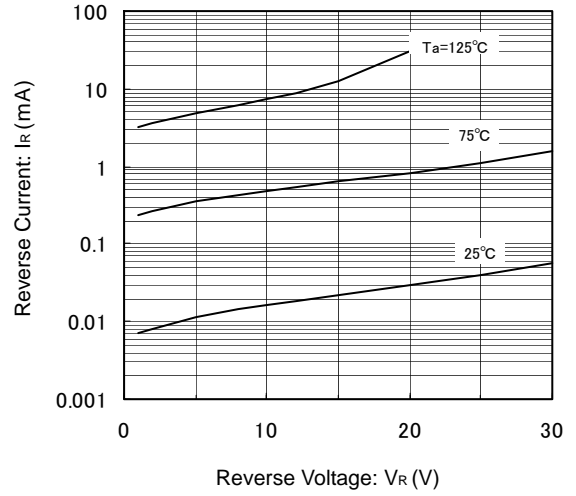


TYPICAL PERFORMANCE CHARACTERISTICS

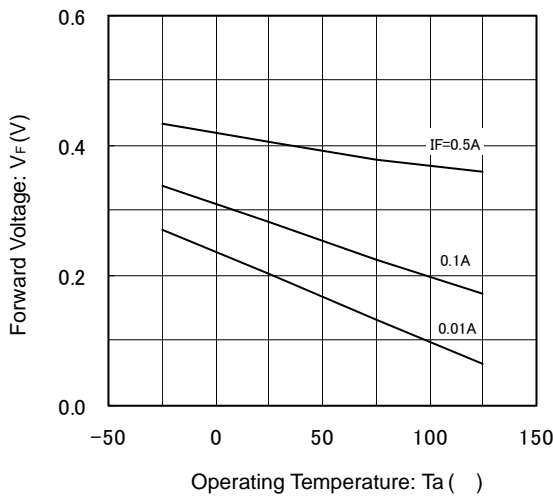
(1) Forward Current vs. Forward Voltage



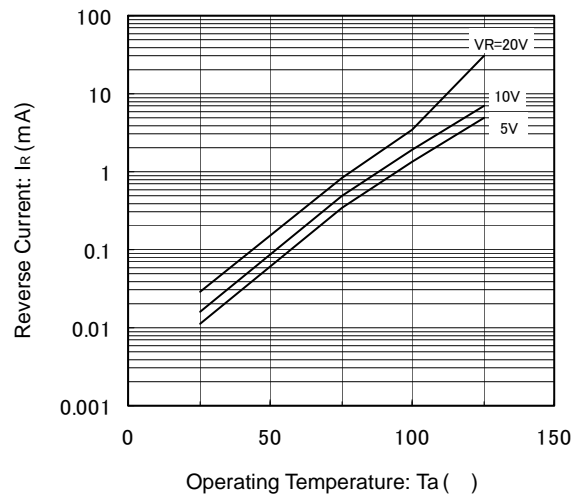
(2) Reverse Current vs. Reverse Voltage



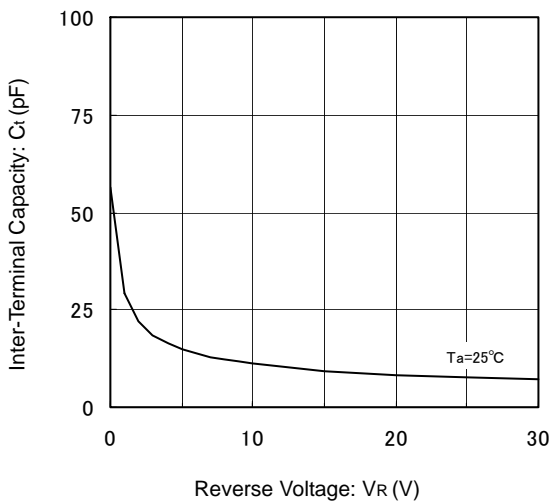
(3) Forward Voltage vs. Operating Temperature



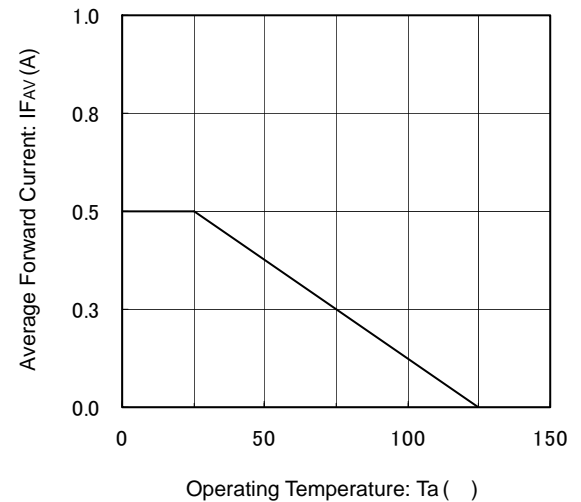
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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