XBS053V15R-G

TOREX

ETR1607-003

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

Environmentally Friendly : EU RoHS Compliant, Pb Free

■APPLICATIONS

●Rectification

●Protection against reverse connection of battery

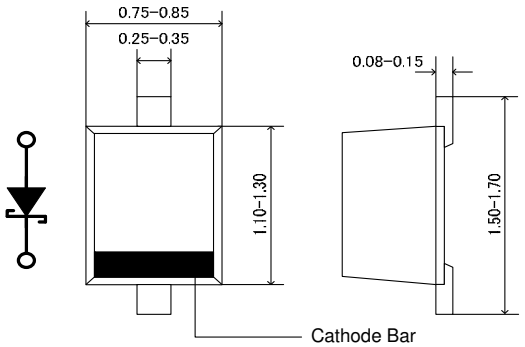
■ABSOLUTE MAXIMUM RATINGS

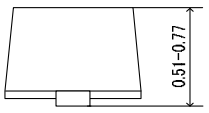
Ta=25℃

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	V_{RM}	30	V
Reverse Voltage (DC)	V_R	20	V
Forward Current (Average)	$I_{F(AV)}$	500	mA
Non Continuous Forward Surge Current *1	I_{FSM}	5	A
Junction Temperature	Tj	125	℃
Storage Temperature Range	Tstg	-55～+150	℃

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

■PACKAGING INFORMATION

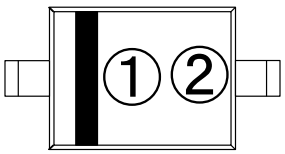




Unit : mm

SOD-523

■MARKING RULE



①: 2 (Product Number)

②: Assembly Lot Number

■PRODUCT NAME

PRODUCT NAME	DEVICE ORIENTATION
XBS053V15R-G	SOD-523(Halogen & Antimony free)
XBS053V15R	SOD-523

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

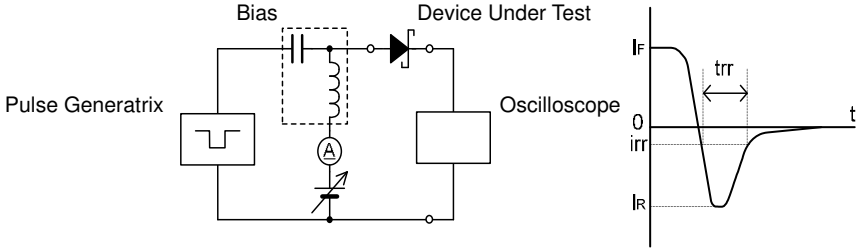
* The device orientation is fixed in its embossed tape pocket.

■ELECTRICAL CHARACTERISTICS

Ta=25℃

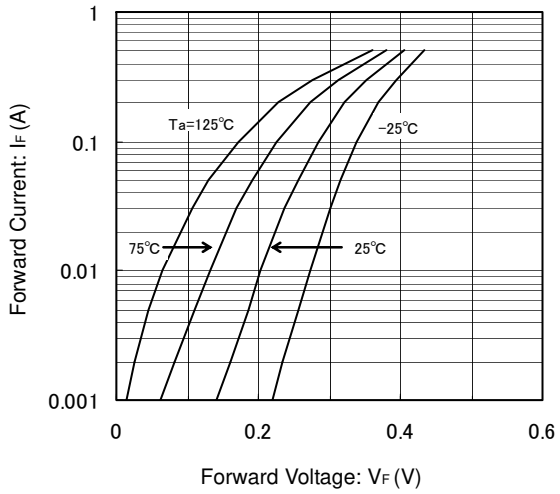
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Forward Voltage	V_{F1}	I_F=100mA	-	0.28	-	V
	V_{F2}	I_F=500mA	-	0.40	0.47	V
Reverse Current	I_R	V_R=20V	-	-	100	μA
Inter-Terminal Capacity	Ct	V_R=10V , f=1MHz	-	12	-	pF
Reverse Recovery Time *2	trr	I_F=I_R=10mA , irr=1mA	-	8	-	ns

*2 : trr measurement circuit

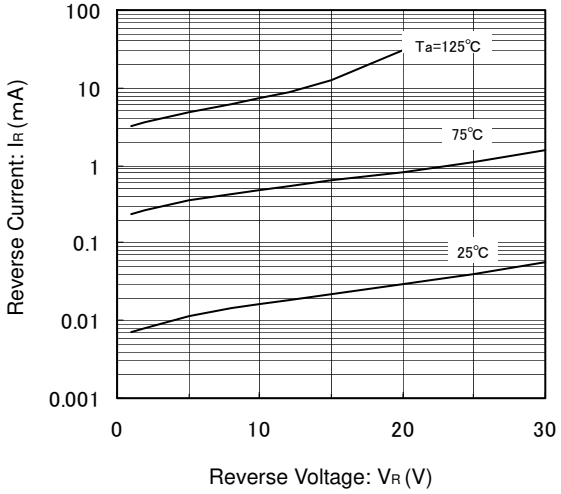


■TYPICAL PERFORMANCE CHARACTERISTICS

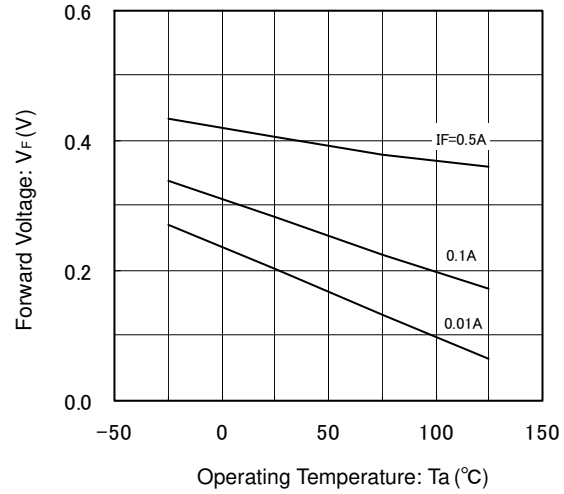
(1) Forward Current vs. Forward Voltage



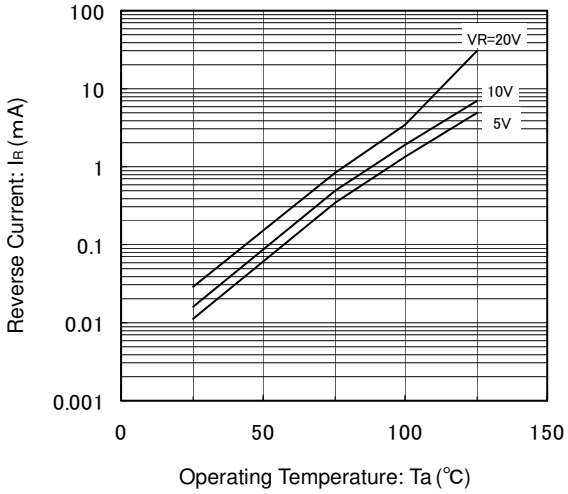
(2) Reverse Current vs. Reverse Voltage



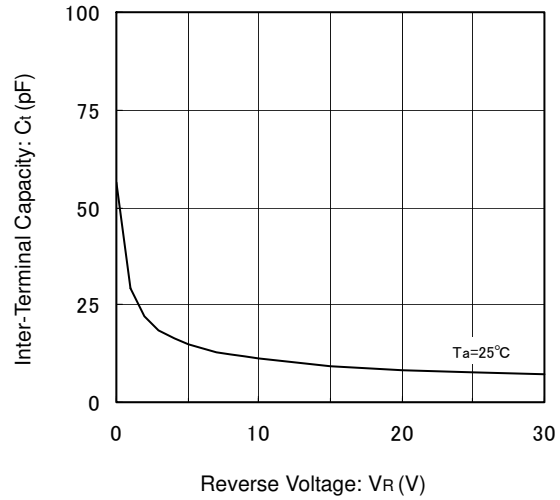
(3) Forward Voltage vs. Operating Temperature



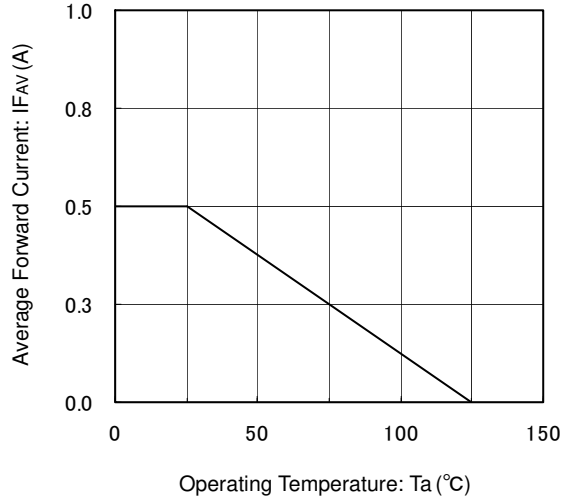
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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