Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

XBS053V13R-G

TOREX

ETR1606-003

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

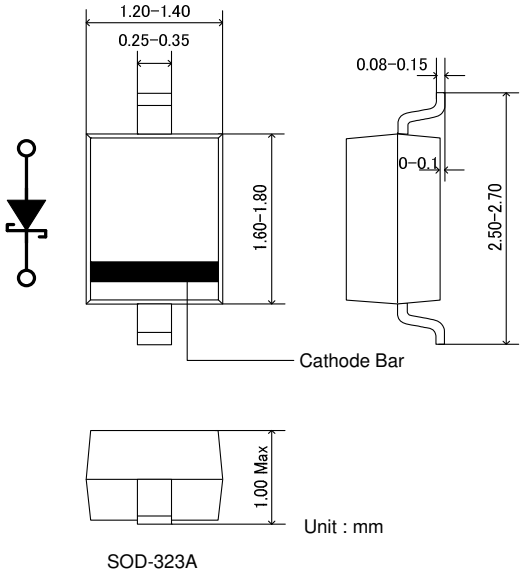
■ABSOLUTE MAXIMUM RATINGS

Ta=25℃

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak 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	℃

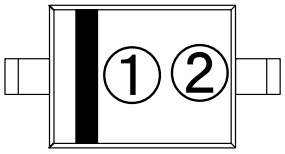
*1 : Non continuous high amplitude 60Hz half-sine wave.

■PACKAGING INFORMATION



SOD-323A

■MARKING RULE



①: 0 (Product Number)

②: Assembly Lot Number

■PRODUCT NAME

PRODUCT NAME	DEVICE ORIENTATION
XBS053V13R	SOD-323A
XBS053V13R-G	SOD-323A(Halogen & Antimony free)

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

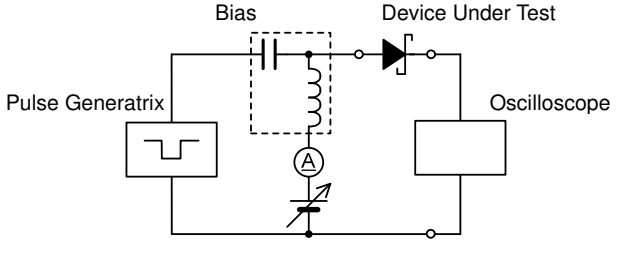
* The device orientation is fixed in its embossed tape pocket.

■ELECTRICAL CHARACTERISTICS

Ta=25℃

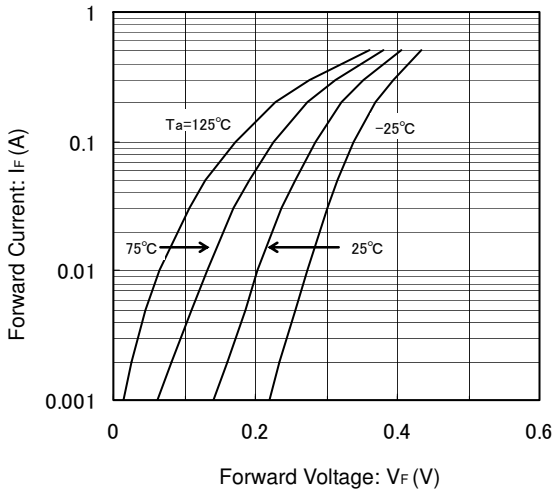
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Forward Voltage	V_{F1}	I_F=100mA	-	0.28	-	V
	V_{F2}	I_F=500mA	-	0.40	0.47	V
Reverse Current	I_R	V_R=20V	-	-	100	μA
Inter-Terminal Capacity	Ct	V_R=10V , f=1MHz	-	12	-	pF
Reverse Recovery Time*2	trr	I_F=I_R=10mA , irr=1mA	-	8	-	ns

*2 : trr measurement circuit

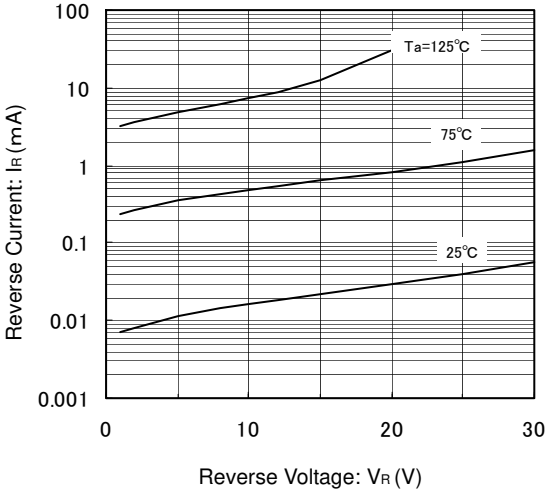


■TYPICAL PERFORMANCE CHARACTERISTICS

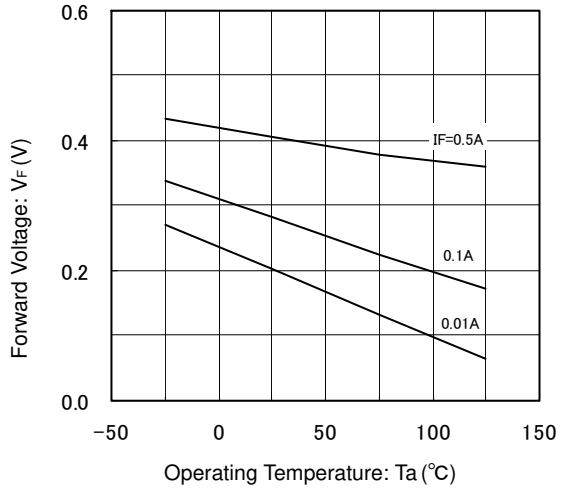
(1) Forward Current vs. Forward Voltage



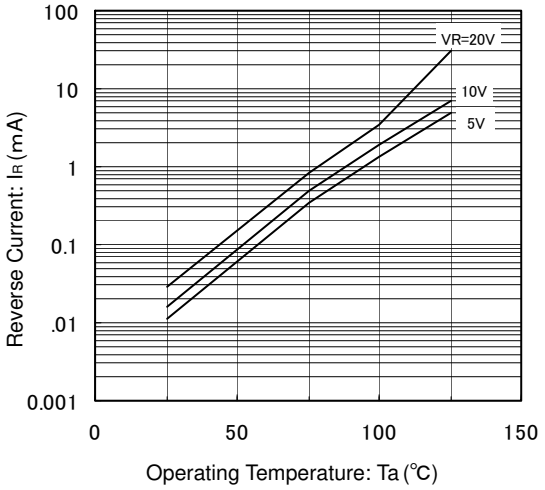
(2) Reverse Current vs. Reverse Voltage



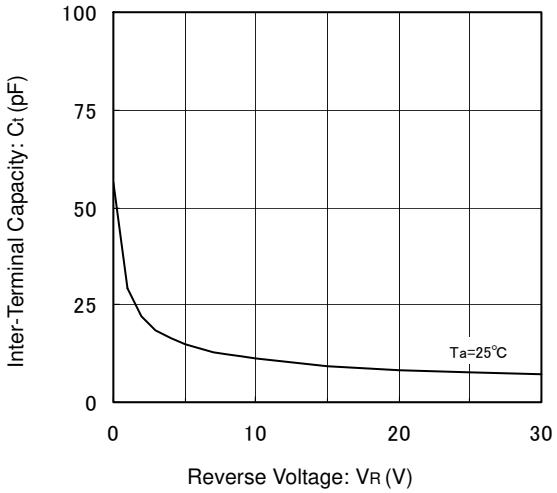
(3) Forward Voltage vs. Operating Temperature



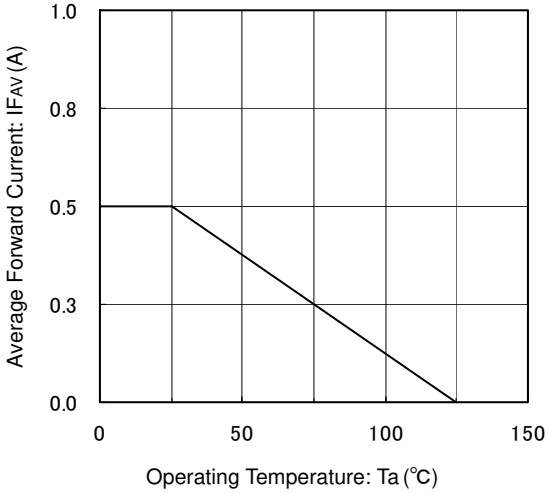
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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