XBS053V13R-G



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

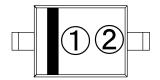
■ ABSOLUTE MAXIMUM RATINGS

Ta=25°C

PARAMETER	SYMBOL	RATINGS	UNIT	
Repetitive Peak Voltage	VRM	30	V	
Reverse Voltage (DC)	VR	20	V	
Forward Current (Average)	lF(AV)	500	mA	
Non Continuous	IFSM	5	۸	
Forward Surge Current ^{*1}	IF5M	5	Α	
Junction Temperature	Tj	125	°C	
Storage Temperature Range	Tstg	-55~+150	℃ (

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

■MARKING RULE

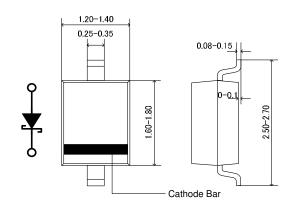


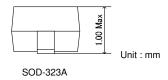
- ①: 0 (Product Number)
- 2: Assembly Lot Number

■APPLICATIONS

- Rectification
- Protection against reverse connection of battery

■ PACKAGING INFORMATION





■ PRODUCT NAME

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

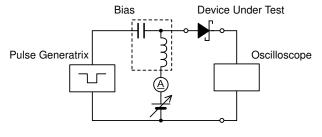
^{*} The "-G" suffix indicates that the products are Halogen and Antimony free as well as being fully RoHS compliant.

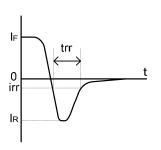
■ELECTRICAL CHARACTERISTICS

Ta=25°C

PARAMETER SYM	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
	STIVIDOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Forward Voltage —	VF1	I _F =100mA	-	0.28	-	V
	VF2	I _F =500mA	-	0.40	0.47	V
Reverse Current	lr	V _R =20V	-	-	100	μΑ
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



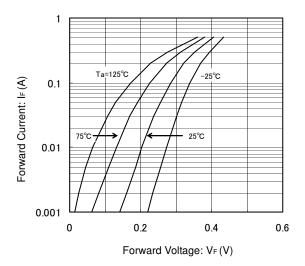


^{*} The device orientation is fixed in its embossed tape pocket.

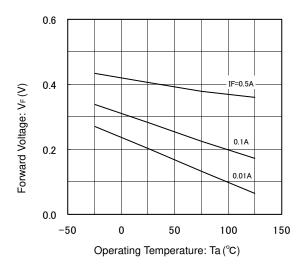
XBS053V13R-G

■TYPICAL PERFORMANCE CHARACTERISTICS

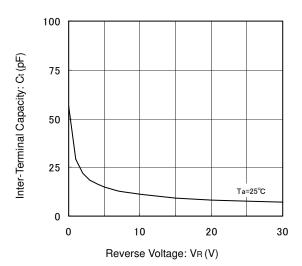
(1) Forward Current vs. Forward Voltage



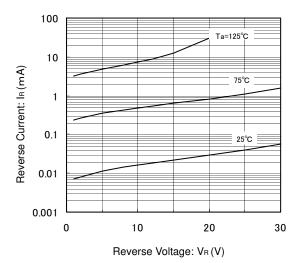
(3) Forward Voltage vs. Operating Temperature

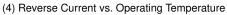


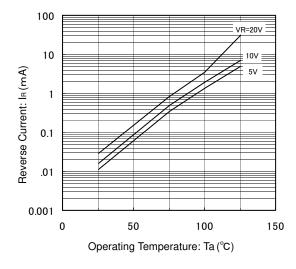
(5) Inter-Terminal Capacity vs. Reverse Voltage



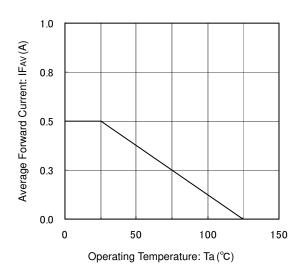
(2) Reverse Current vs. Reverse Voltage







(6) Average Forward Current vs. Operating Temperature



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