XBS203V17R-G

TOREX

ETR1611-001a

Schottky Barrier Diode, 2A, 30V Type

■FEATURES

Forward Voltage : V_F=0.35V (TYP.)

Forward Current : $I_{F(AVE)}$=2A

Repetitive Peak Reverse Voltage : V_{RM}=30V

■APPLICATIONS

●Rectification

●Protection against reverse connection of battery

■ABSOLUTE MAXIMUM RATINGS

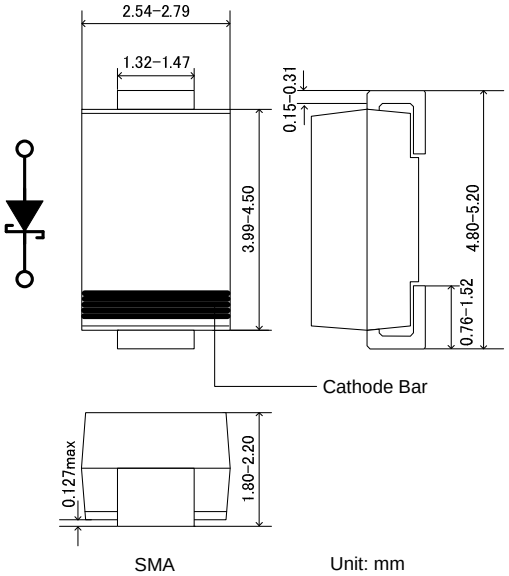
Ta=25℃

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	V_{RM}	30	V
Reverse Voltage (DC)	V_R	30	V
Forward Current (Average)	$I_{F(AVE)}$	2	A
Non Continuous Forward Surge Current*1	I_{FSM}	50	A
Junction Temperature	Tj	125	℃
Storage Temperature Range	Tstg	-55～+150	℃

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

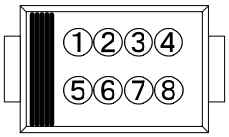
* When the IC is operated continuously under high load conditions such as high temperature, high current and high voltage, it may have the case that reliability reduces drastically even if under the absolute maximum ratings. Adequate “Derating” should be taken into consideration while designing.

■PACKAGING INFORMATION



SMA Unit: mm

■MARKING RULE



①②③④⑤⑥: 203V17 (Product Number)

⑦⑧ : Assembly Lot Number

■PRODUCT NAME

PRODUCT NAME	DEVICE ORIENTATION
XBS203V17R-G	SMA (Halogen & Antimony free)
XBS203V17R	SMA

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

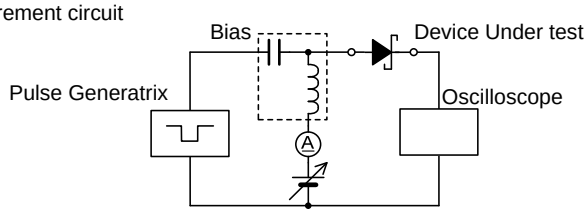
* The device orientation is fixed in its embossed tape pocket.

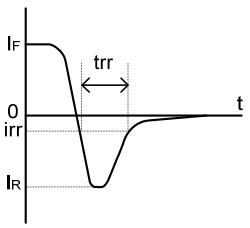
■ELECTRICAL CHARACTERISTICS

Ta=25℃

PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Forward Voltage	V_{F1}	I_F=0.5A	-	0.28	0.365	V
	V_{F2}	I_F=1A	-	0.305	0.375	V
	V_{F3}	I_F=2A	-	0.35	0.39	V
Reverse Current	I_R	V_R=30V	-	0.35	3	mA
Inter-Terminal Capacity	Ct	V_R=1V , f=1MHz	-	280	-	pF
Reverse Recovery Time*2	trr	I_F=I_R=10mA , irr=1mA ,	-	70	-	ns

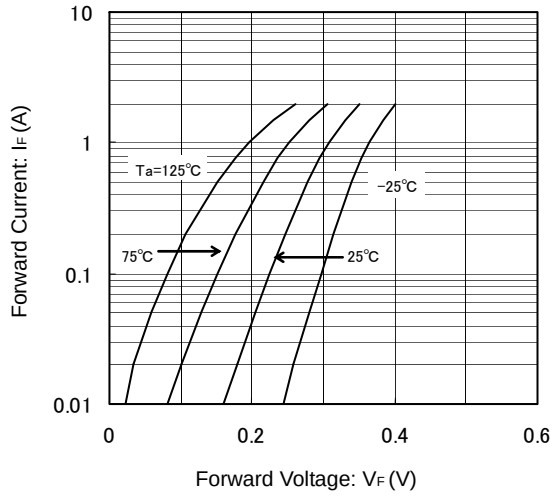
*2 : trr measurement circuit



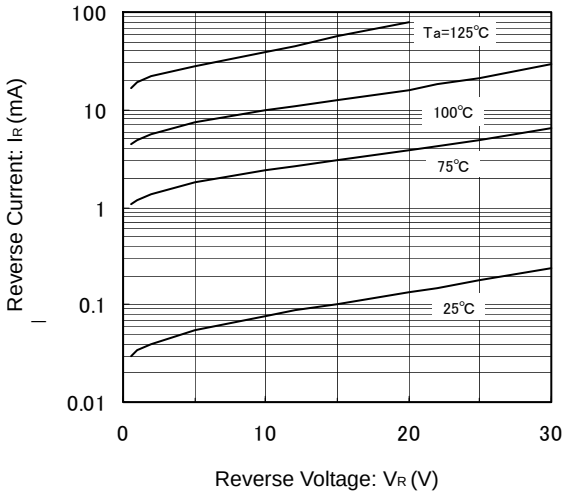


■TYPICAL PERFORMANCE CHARACTERISTICS

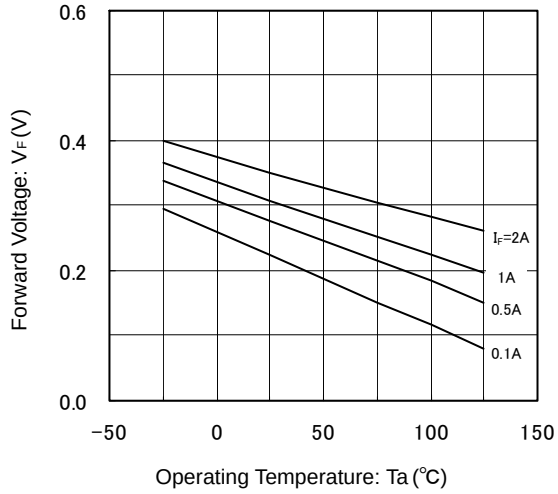
(1) Forward Current vs. Forward Voltage



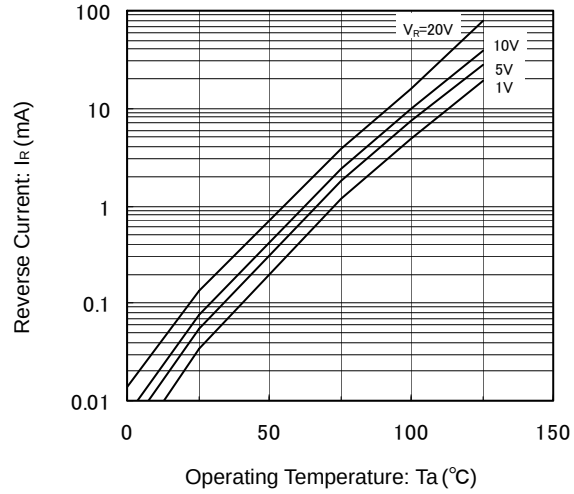
(2) Reverse Current vs. Reverse Voltage



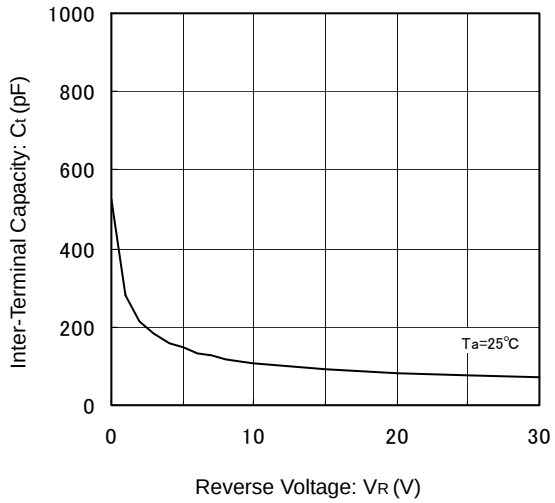
(3) Forward Voltage vs. Operating Temperature



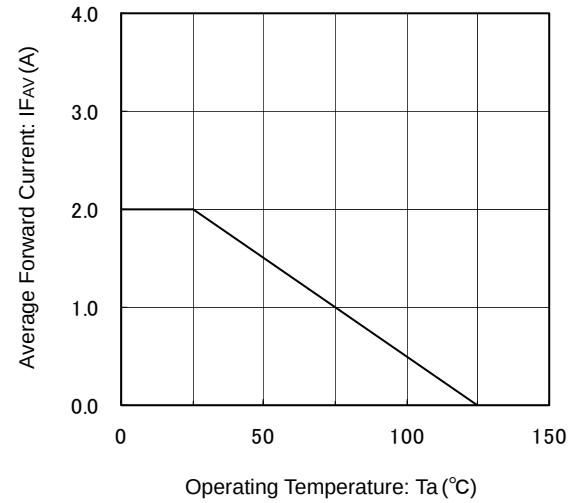
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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