ETR1614-001a

Schottky Barrier Diode, 3A, 30V Type

■FEATURES

Forward Voltage : V_F=0.355V (TYP.)

Forward Current : $I_{F(AVE)}=3A$ Repetitive Peak Reverse Voltage : $V_{RM}=30V$

■APPLICATIONS

- Rectification
- Protection against reverse connection of battery

■ABSOLUTE MAXIMUM RATINGS

Ta=25°C

PARAMETER	SYMBOL	RATINGS	UNIT	
Repetitive Peak Reverse Voltage	VRM	30	V	
Reverse Voltage (DC) VR		30	V	
Forward Current (Average)	IF(AVE) 3		Α	
Non Continuous	IFSM	60	Α	
Forward Surge Current ^{*1}	IFSM	00	A	
Junction Temperature	Tj	125	လ	
Storage Temperature Range	Tstg	-55 ~ +150	°C	

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

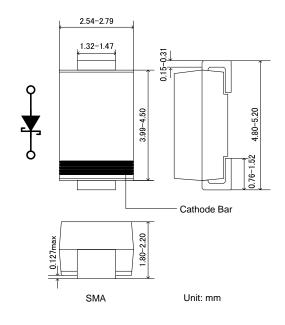
■MARKING RULE



123456: 303V17(Product Number)

78 : Assembly Lot Number

■ PACKAGING INFORMATION



■PRODUCT NAME

PRODUCT NAME	DEVICE ORIENTATION		
XBS303V17R-G	SMA (Halogen & Antimony free)		
XBS303V17R	SMA		

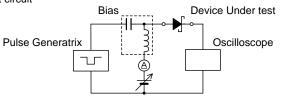
^{*} The "-G" suffix indicates that the products are Halogen and Antimony free as well as being fully RoHS compliant.

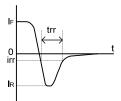
■ELECTRICAL CHARACTERISTICS

Ta=25°C

PARAMETER SYMBOL	CVMDOL	TEST CONDITIONS	LIMITS			UNIT
	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT	
Forward Voltage V	VF1	I _F =0.5A	-	0.265	0.34	V
	VF2	I _F =1A	-	0.295	0.36	V
	VF3	I _F =3A	-	0.355	0.39	V
Reverse Current	lr	V _R =30V	-	0.35	3	mA
Inter-Terminal Capacity	Ct	V _R =1V , f=1MHz	-	385	-	pF
Reverse Recovery Time*2	trr	I _F =I _R =10mA , irr=1mA	-	90	=	ns

^{*2 :} trr measurement circuit





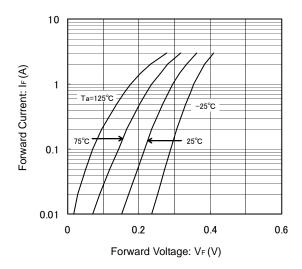
^{*} When the IC is operated continuously under high load conditions such as high temperature, high current and high voltage, it may have the case that reliability reduces drastically even if under the absolute maximum ratings. Adequate "Derating" should be taken into consideration while designing.

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

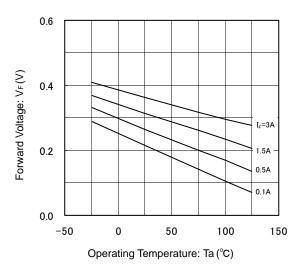
XBS303V17R-G

■TYPICAL PERFORMANCE CHARACTERISTICS

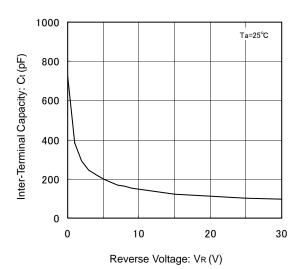
(1) Forward Current vs. Forward Voltage



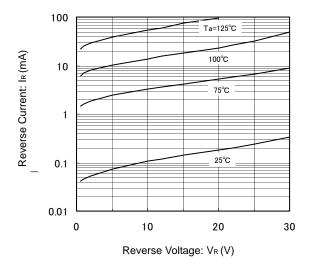
(3) Forward Voltage vs. Operating Temperature



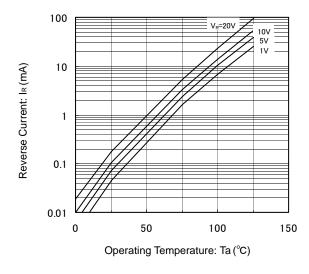
(5) Inter-Terminal Capacity vs. Reverse Voltage



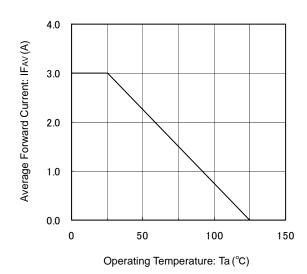
(2) Reverse Current vs. Reverse Voltage



(4) Reverse Current vs. Operating Temperature



(6) Average Forward Current vs. Operating Temperature



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