XBS104S14R-G

TOREX

ETR1609-003

Schottky Barrier Diode, 1A, 40V, SOD-123A Package

■FEATURES

Forward Voltage : V_F=0.49V (TYP.)
Forward Current : $I_{F(AV)}$=1A
Repetitive Peak Reverse Voltage : V_{RM}=40V

■APPLICATIONS

●Rectification
●Protection against reverse connection of battery

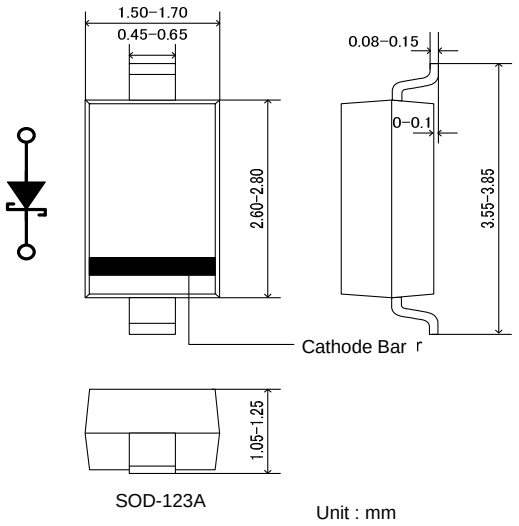
■ABSOLUTE MAXIMUM RATINGS

Ta=25℃

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	V_{RM}	40	V
Reverse Voltage (DC)	V_R	40	V
Forward Current (Average)	$I_{F(AV)}$	1	A
Non Continuous Forward Surge Current *1	I_{FSM}	10	A
Junction Temperature	Tj	125	℃
Storage Temperature Range	Tstg	-55～+150	℃

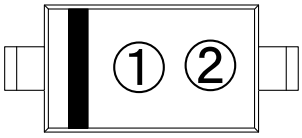
*1：Non continuous high amplitude 60Hz half-sine wave.

■PACKAGING INFORMATION



Unit : mm

■MARKING RULE



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

■PRODUCT NAME

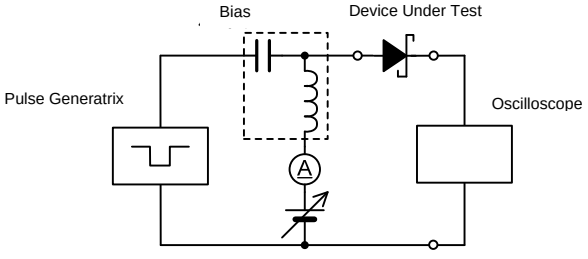
PRODUCT NAME	DESCRIPTION
XBS104S14R	SOD-123A
XBS104S14R-G	SOD-123A (Halogen & Antimony free)

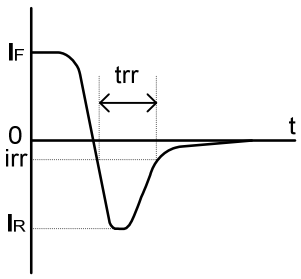
■ELECTRICAL CHARACTERISTICS

Ta=25℃

PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Forward Voltage	V_{F1}	I_F=100mA	-	0.34	-	V
	V_{F2}	I_F=1A	-	0.49	0.54	V
Reverse Current	I_R	V_R=40V	-	4	200	μA
Inter-Terminal Capacity	Ct	V_R=10V ,,f=1MHz	-	35	-	pF
Reverse Recovery Time *2	trr	I_F=I_R=10mA , irr=1mA , RL=100Ω	-	25	-	ns

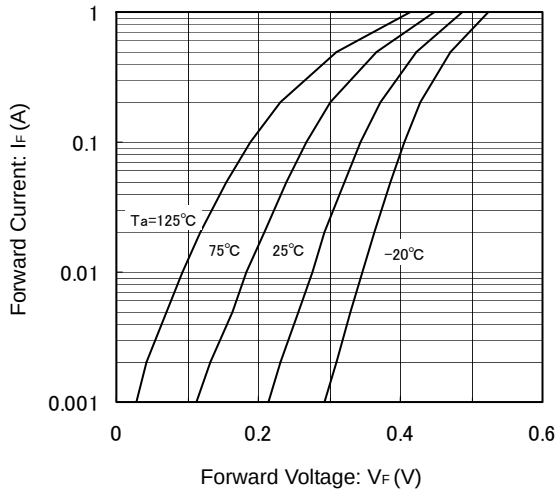
*2：trr measurement circuit



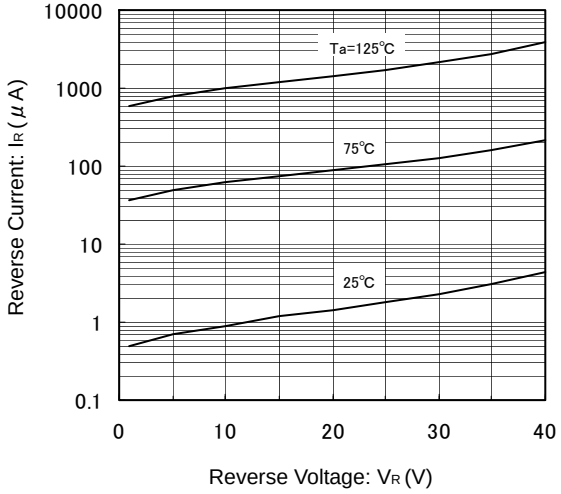


■TYPICAL PERFORMANCE CHARACTERISTICS

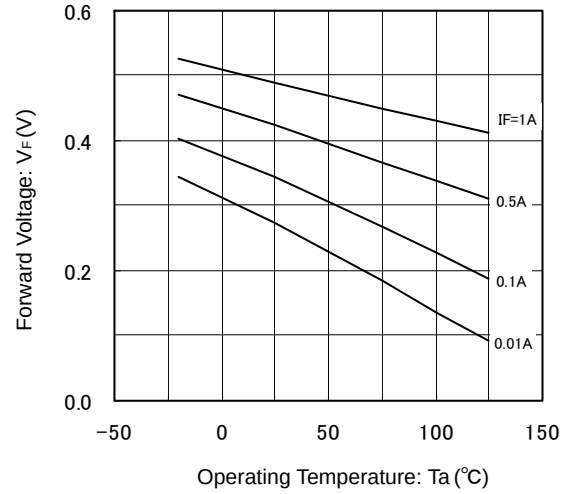
(1) Forward Current vs. Forward Voltage



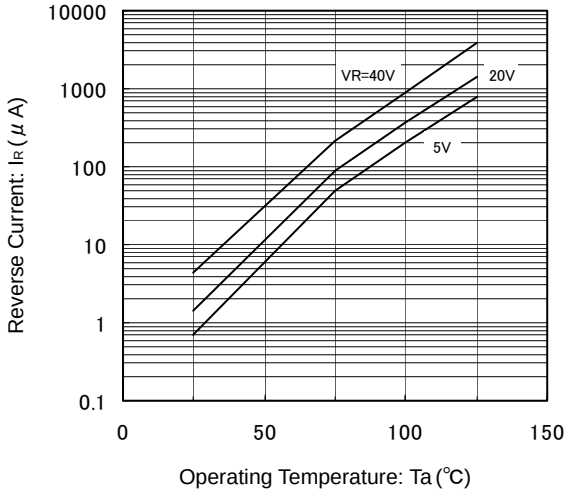
(2) Reverse Current vs. Reverse Voltage



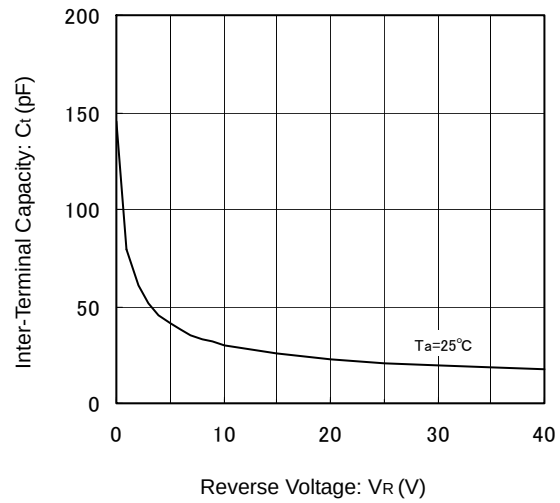
(3) Forward Voltage vs. Operating Temperature



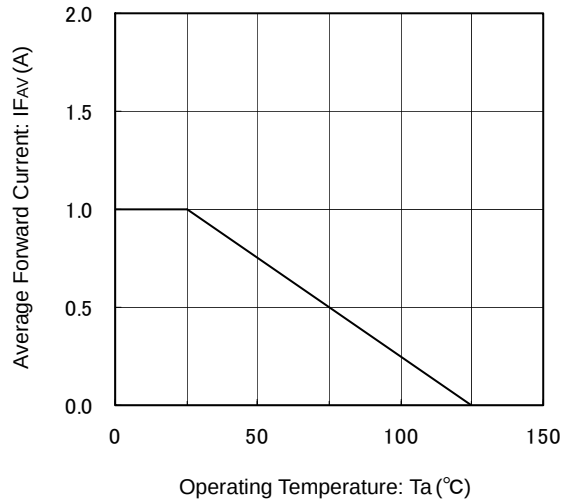
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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