



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.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# XBS204S17R-G

Schottky Barrier Diode, 2A, 40V Type

## FEATURES

- Forward Voltage :  $V_F=0.485V$  (TYP.)
- Forward Current :  $I_{F(AVE)}=2A$
- Repetitive Peak Reverse Voltage :  $V_{RM}=40V$

## APPLICATIONS

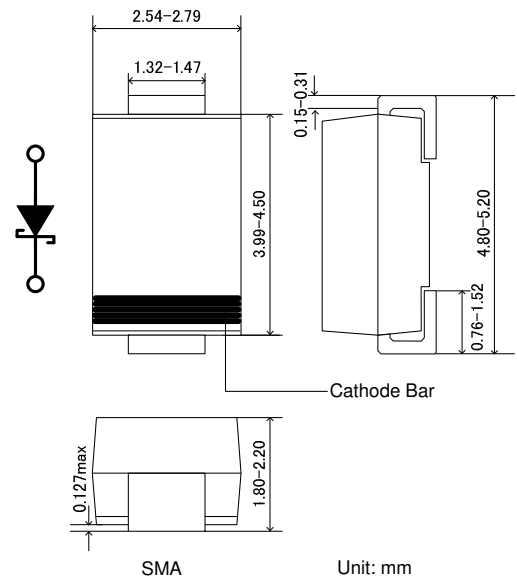
- Rectification
- Protection against reverse connection of battery

## ABSOLUTE MAXIMUM RATINGS

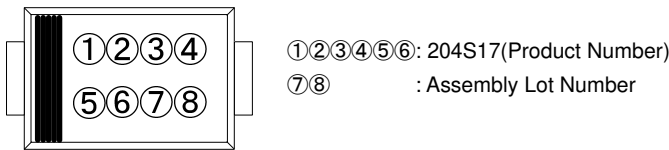
$T_a=25^\circ C$

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	$V_{RM}$	40	V
Reverse Voltage (DC)	$V_R$	40	V
Forward Current (Average)	$I_{F(AVE)}$	2	A
Non Continuous Forward Surge Current <sup>*1</sup>	$I_{FSM}$	50	A
Junction Temperature	$T_j$	125	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55~+150	$^\circ C$

## PACKAGING INFORMATION



## MARKING RULE



## PRODUCT NAME

PRODUCT NAME	DEVICE ORIENTATION
XBS204S17R-G	SMA (Halogen & Antimony free)
XBS204S17R	SMA

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

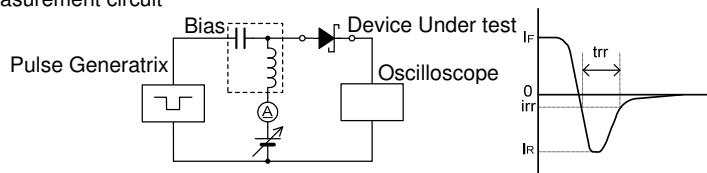
\* The device orientation is fixed in its embossed tape pocket.

## ELECTRICAL CHARACTERISTICS

$T_a=25^\circ C$

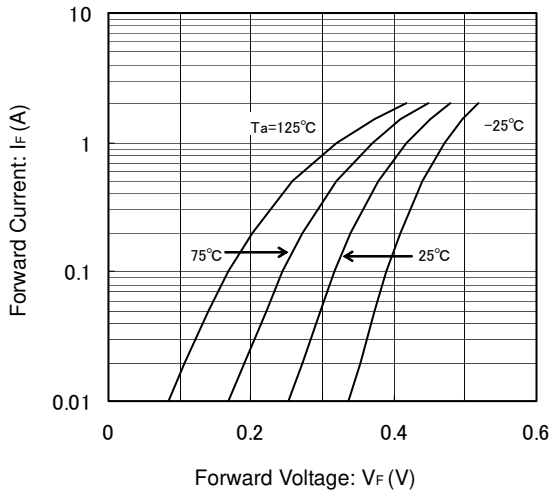
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNIT
			MIN.	TYP.	MAX.	
Forward Voltage	$V_{F1}$	$I_F=200\mu A$	-	0.15	-	V
	$V_{F2}$	$I_F=2A$	-	0.485	0.54	V
Reverse Current	$I_{R1}$	$V_R=20V$	-	2.5	-	$\mu A$
	$I_{R2}$	$V_R=40V$	-	6	200	$\mu A$
Inter-Terminal Capacity	$C_t$	$V_R=1V, f=1MHz$	-	180	-	pF
Reverse Recovery Time <sup>*2</sup>	$t_{rr}$	$I_F=I_R=10mA, irr=1mA$	-	51	-	ns

\*2 :  $t_{rr}$  measurement circuit

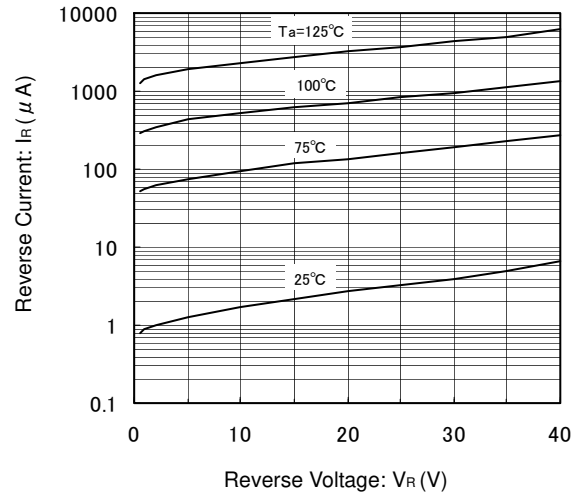


## TYPICAL PERFORMANCE CHARACTERISTICS

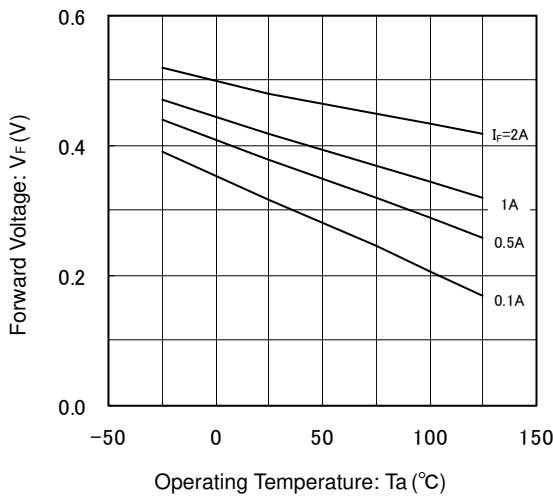
(1) Forward Current vs. Forward Voltage



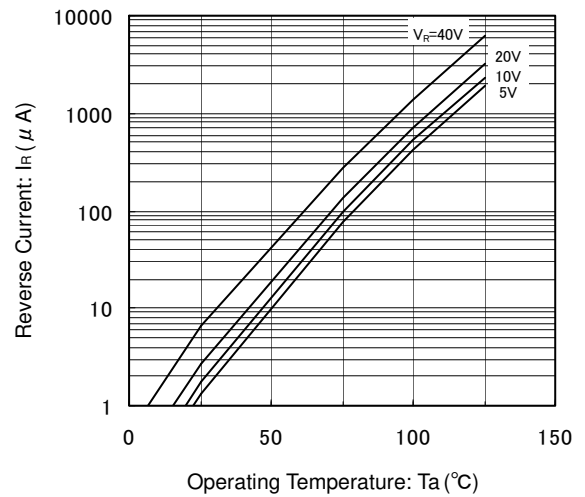
(2) Reverse Current vs. Reverse Voltage



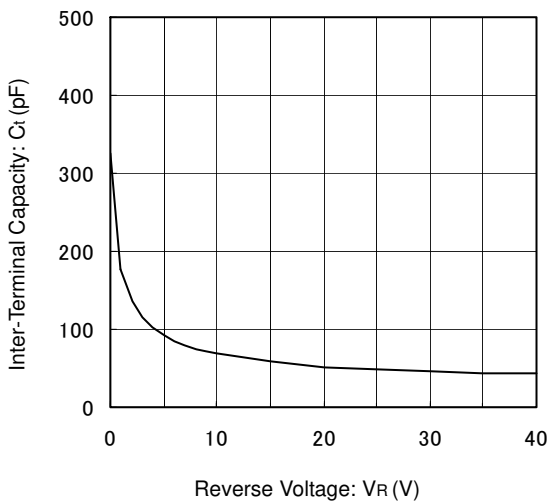
(3) Forward Voltage vs. Operating Temperature



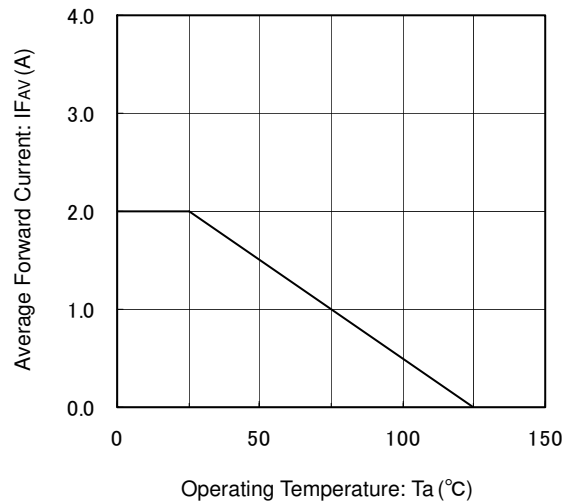
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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