

XBS204S19R-G

Schottky Barrier Diode, 2A, 40V Type

FEATURES

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

ABSOLUTE MAXIMUM RATINGS

$T_a=25^\circ C$

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

^(*) Non continuous high amplitude 60Hz half-sine wave.

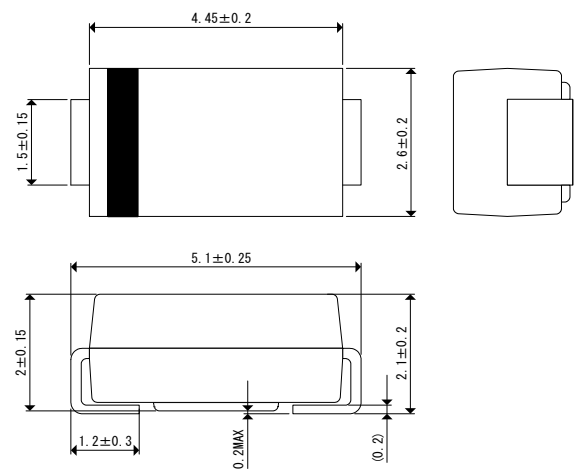
APPLICATIONS

- Rectification
- Protection against reverse connection of battery

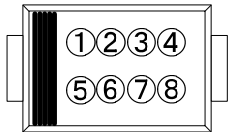
PACKAGING INFORMATION

SMA-XG

Unit : mm



MARKING RULE



①②③④⑤⑥: 204S19 (Product Number)
 ⑦⑧ : Assembly Lot Number

PRODUCT NAME

PRODUCT NAME	PACKAGE	ORDER UNIT
XBS204S19R-G *	SMA-XG	2,000pcs/Reel

* The "-G" suffix denotes Halogen and Antimony free as well as being fully EU RoHS compliant.

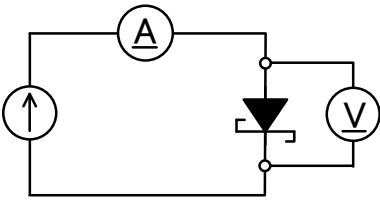
ELECTRICAL CHARACTERISTICS

$T_a=25^\circ C$

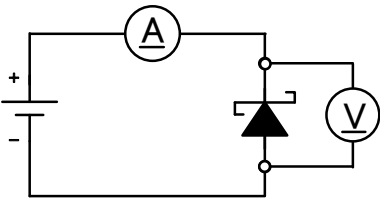
PARAMETER	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNITS	CIRCUIT
Forward Current	V_F	$I_F=2A$	-	0.485	0.54	V	①
Reverse Current	I_{R1}	$V_R=30V$	-	2.5	-	μA	②
	I_{R2}	$V_R=60V$	-	6	200	μA	②
Inter-Terminal Capacity	C_t	$V_R=1V, f=1MHz$	-	180	-	pF	③
Reverse Recovery Time	t_{rr}	$I_F=I_R=10mA, irr=1mA$	-	51	-	ns	④

TEST CIRCUITS

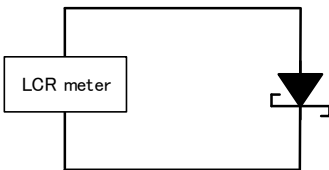
Circuit①



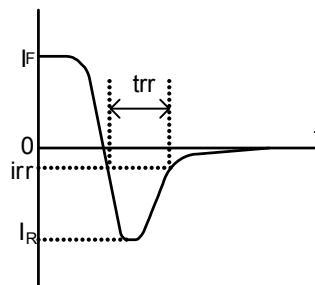
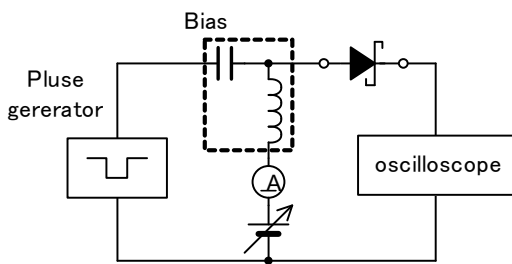
Circuit②



Circuit③



Circuit④

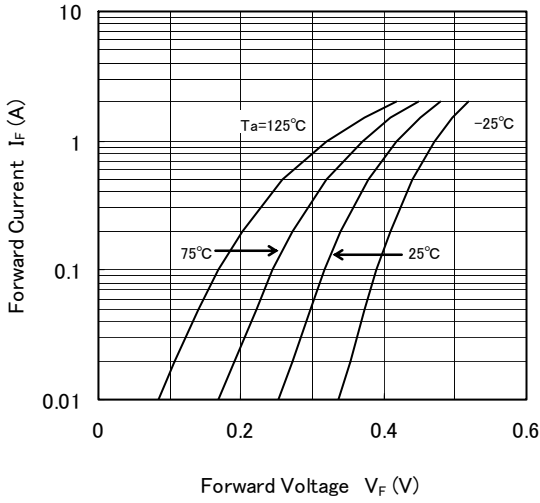


NOTES ON USE

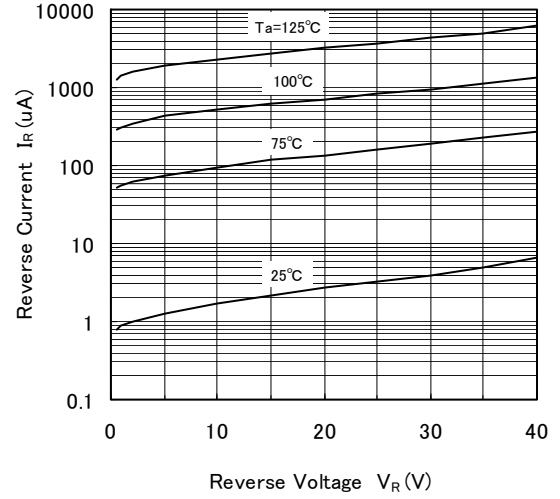
- 1) Please use this IC within the absolute maximum ratings.
- 2) Even within the ratings, in case of high load use continuously such as high temperature, high voltage, high current and thermal stress may cause reliability degradation of the IC. Adequate "Derating" should be taken into consideration while designing.
- 3) Torex places an importance on improving our products and their reliability. We request that users incorporate fail-safe designs and post-aging protection treatment when using Torex products in their systems.

TYPICAL PERFORMANCE CHARACTERISTICS

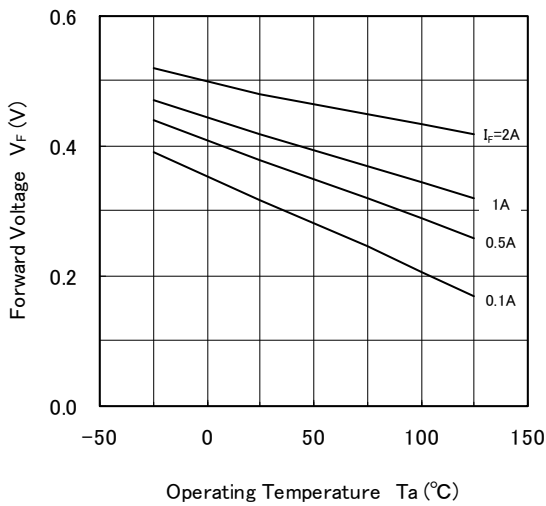
(1) Forward Current vs. Forward Voltage



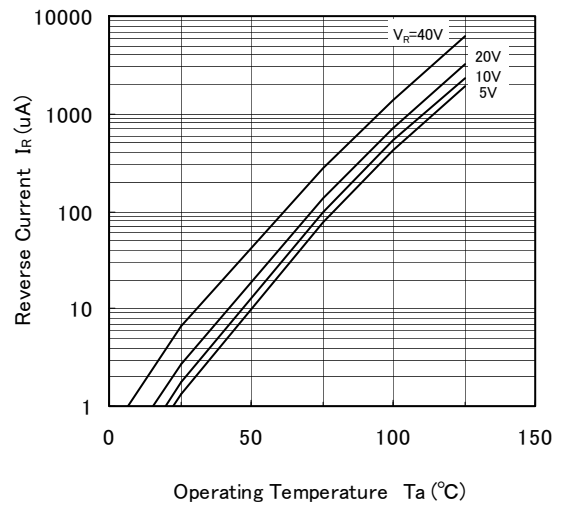
(2) Reverse Current vs. Reverse Voltage



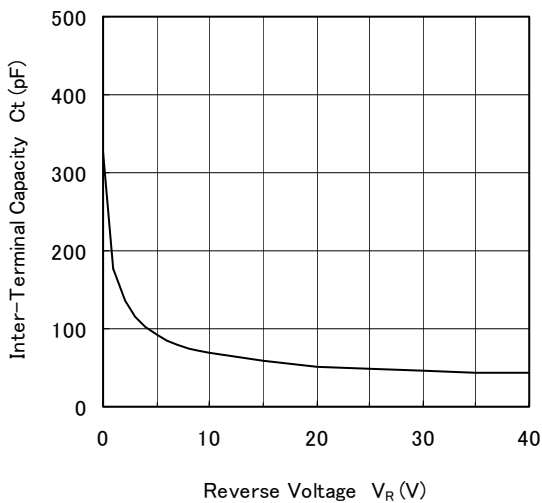
(3) Forward Voltage vs. Operating Temperature



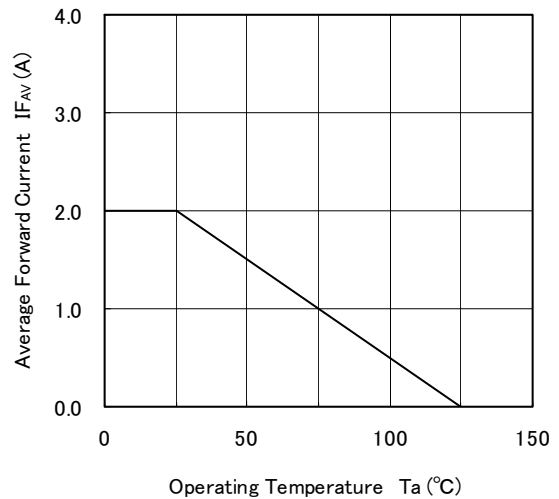
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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5. Although we make continuous efforts to improve the quality and reliability of our products; nevertheless Semiconductors are likely to fail with a certain probability. So in order to prevent personal injury and/or property damage resulting from such failure, customers are required to incorporate adequate safety measures in their designs, such as system fail safes, redundancy and fire prevention features.
6. Our products are not designed to be Radiation-resistant.
7. Please use the product listed in this datasheet within the specified ranges.
8. We assume no responsibility for damage or loss due to abnormal use.
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С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

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- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
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- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
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- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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