

XBS203V17R-G

查询XBS203V17R-G供应商

TOIREX

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 : $V_{RM}=30V$

ABSOLUTE MAXIMUM RATINGS

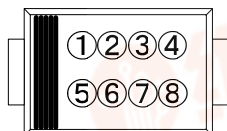
$T_a=25^{\circ}C$

| 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 | T_j | 125 | $^{\circ}C$ |
| Storage Temperature Range | T_{stg} | -55~+150 | $^{\circ}C$ |

*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.

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.

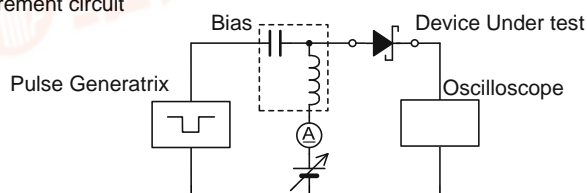
* The device orientation is fixed in its embossed tape pocket.

ELECTRICAL CHARACTERISTICS

$T_a=25^{\circ}C$

| 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 | C_t | $V_R=1V, f=1MHz$ | - | 280 | - | pF |
| Reverse Recovery Time ^{*2} | t_{rr} | $I_F=I_R=10mA, i_{rr}=1mA,$ | - | 70 | - | ns |

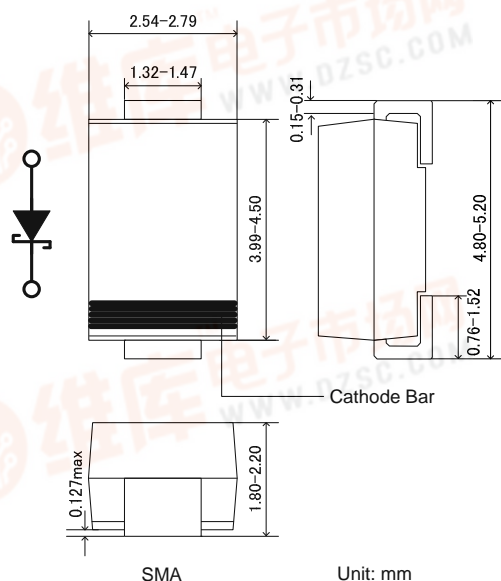
*2 : t_{rr} measurement circuit



APPLICATIONS

- Rectification
- Protection against reverse connection of battery

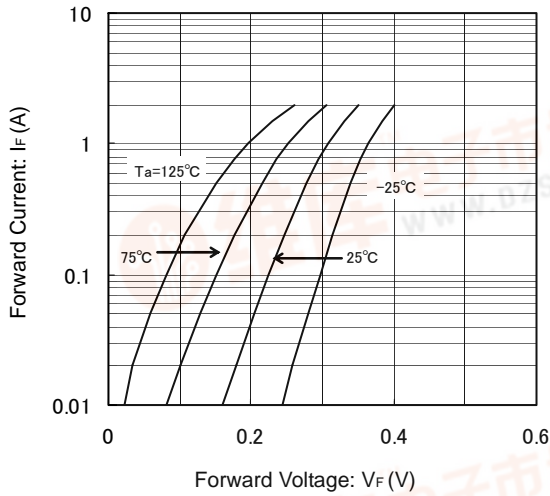
PACKAGING INFORMATION



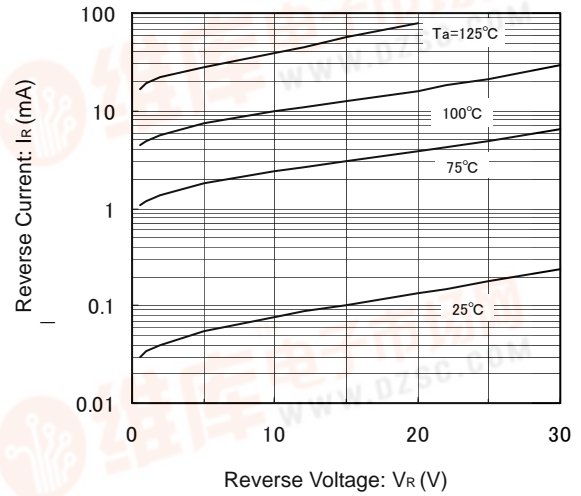
Unit: mm

TYPICAL PERFORMANCE CHARACTERISTICS

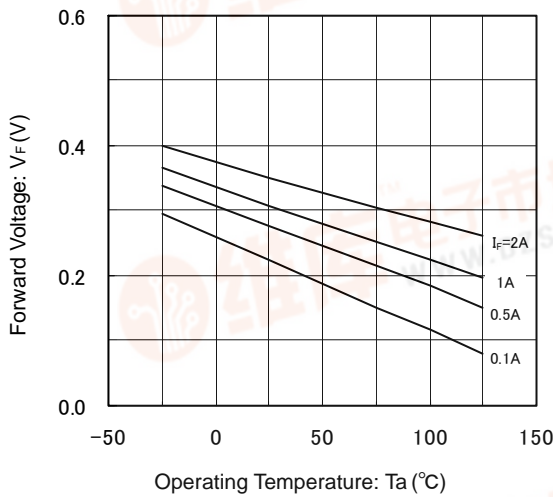
(1) Forward Current vs. Forward Voltage



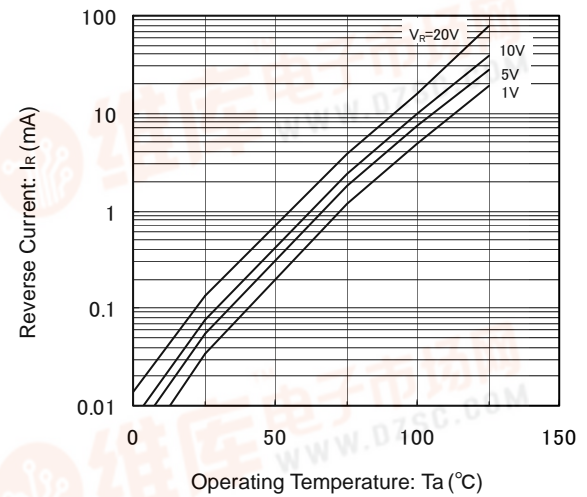
(2) Reverse Current vs. Reverse Voltage



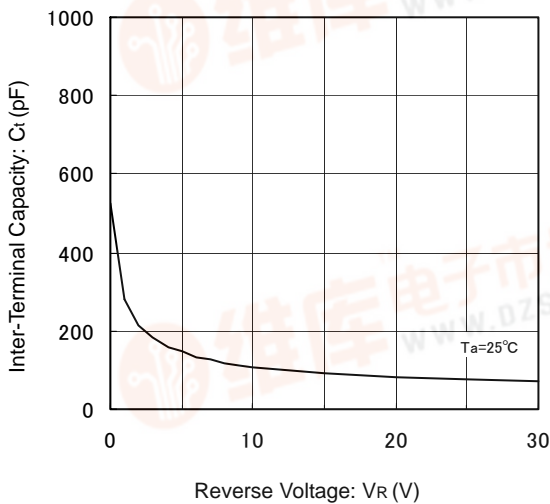
(3) Forward Voltage vs. Operating Temperature



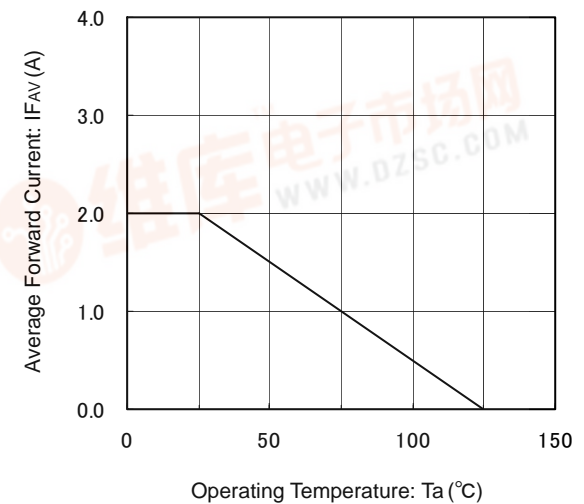
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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