XBS304S17R-G



ETR1615-002a

Schottky Barrier Diode, 3A, 40V Type

■FEATURES

Forward Voltage : V_F=0.465V (TYP.)

Forward Current : $I_{F(AVE)}$ =3A

Repetitive Peak Reverse Voltage : V_{RM}=40V

■APPLICATIONS

- Rectification
- Protection against reverse connection of battery

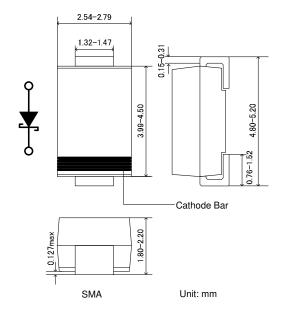
■ ABSOLUTE MAXIMUM RATINGS

Ta=25°0

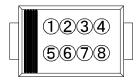
| PARAMETER | SYMBOL | BOL RATINGS | | |
|-------------------------------------|------------------------|-------------------|----|--|
| Repetitive Peak Reverse Voltage | VRM | 40 | ٧ | |
| Reverse Voltage (DC) | everse Voltage (DC) VR | | V | |
| Forward Current (Average) | IF(AVE) | IF(AVE) 3 | | |
| Non Continuous | IFSM | 60 | ۸ | |
| Forward Surge Current ^{*1} | IFSM | 60 | Α | |
| Junction Temperature | Tj | 125 | လူ | |
| Storage Temperature Range | Tstg | -55 ~ +150 | °C | |

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

■ PACKAGING INFORMATION



■MARKING RULE



①23456: 304S17(Product Number)

3 : Assembly Lot Number

■PRODUCT NAME

| PRODUCT NAME | DEVICE ORIENTATION |
|--------------|-------------------------------|
| XBS304S17R-G | SMA (Halogen & Antimony free) |
| XBS304S17R | SMA |

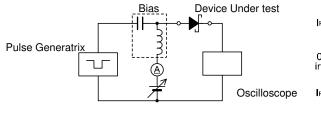
^{*} The "-G" suffix indicates that the products are Halogen and Antimony free as well as being fully RoHS compliant.

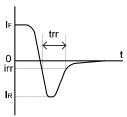
■ELECTRICAL CHARACTERISTICS

Ta=25°C

| PARAMETER SYM | CVMPOL | SYMBOL TEST CONDITIONS | LIMITS | | | UNIT |
|-------------------------|-----------------|--|--------|-------|------|------|
| | STIVIBOL | | MIN. | TYP. | MAX. | UNII |
| Forward Voltage | VF1 | I _F =200 μ A | - | 0.135 | - | V |
| | VF2 | I _F =3A | - | 0.465 | 0.51 | V |
| Reverse Current — | l _{R1} | V _R =20V | - | 5 | - | μΑ |
| | IR2 | V _R =40V | - | 15 | 300 | μΑ |
| Inter-Terminal Capacity | Ct | V _R =1V , f=1MHz | - | 180 | - | pF |
| Reverse Recovery Time*2 | trr | I _F =I _R =10mA , irr=1mA | - | 82 | - | ns |

^{*2 :} trr measurement circuit



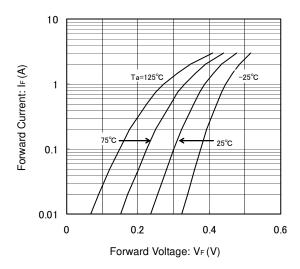


^{*} The device orientation is fixed in its embossed tape pocket.

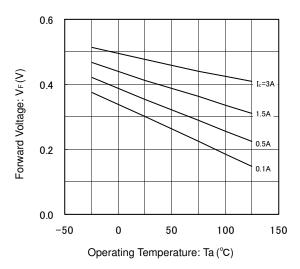
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■TYPICAL PERFORMANCE CHARACTERISTICS

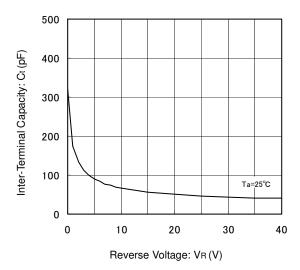
(1) Forward Current vs. Forward Voltage



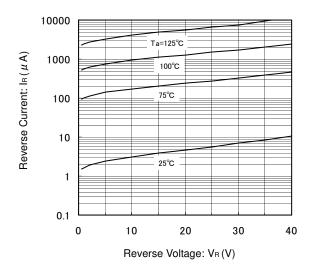
(3) Forward Voltage vs. Operating Temperature



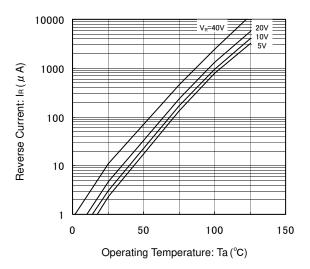
(5) Inter-Terminal Capacity vs. Reverse Voltage



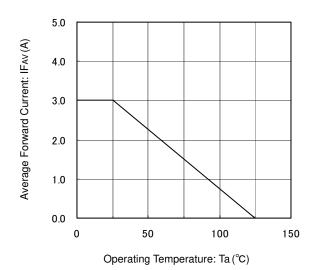
(2) Reverse Current vs. Reverse Voltage



(4) Reverse Current vs. Operating Temperature



(6) Average Forward Current vs. Operating Temperature



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