

# **Surface Mount Schottky Barrier Diode**

#### **FEATURES**

- Designed for mounting on small surface
- Extremely thin/leadless package
- Low capacitance
- Low forward voltage drop
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21









0603-B

#### **MECHANICAL DATA**

- Case: 0603-B

- Terminal: Gold plated, solderable per

MIL-STD-750, method 2026

- Polarity: Indicated by cathode band - Weight: 3 mg (approximately)

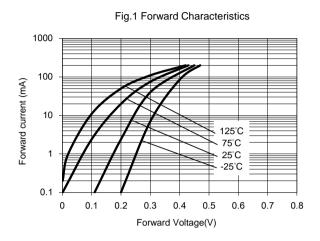
- Marking code: BA

| PARAMETER                                                                            | SYMBOL           | VALUE       | UNIT |
|--------------------------------------------------------------------------------------|------------------|-------------|------|
| r aname i en                                                                         | SIMBOL           | VALUE       | UNII |
| Repetitive Peak Reverse Voltage                                                      | $V_{RRM}$        | 35          | V    |
| DC Reverse Voltage                                                                   | $V_R$            | 30          | V    |
| Average Forward Current                                                              | I <sub>O</sub>   | 200         | mA   |
| Peak Forward Surge Current 8.3 ms Single Half<br>Sine-Wave Superimposed on Rate Load | I <sub>FSM</sub> | 1.0         | А    |
| Power Dissipation                                                                    | Pd               | 150         | mW   |
| Forward Voltage @ I <sub>F</sub> =200mA                                              | V <sub>F</sub>   | 0.5         | V    |
| Reverse Leakage Current V <sub>R</sub> =10V                                          | I <sub>R</sub>   | 30          | μΑ   |
| Junction Temperature                                                                 | T <sub>J</sub>   | -40 to +125 | °C   |
| Storage Temperature                                                                  | T <sub>STG</sub> | -40 to +125 | °C   |



### **RATINGS AND CHARACTERISTICS CURVES**

(T<sub>A</sub>=25°C unless otherwise noted)



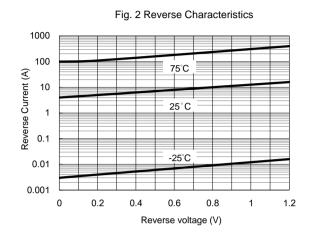
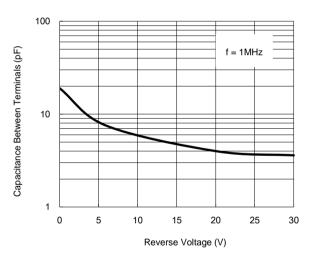
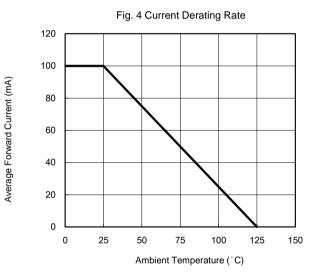
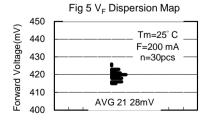
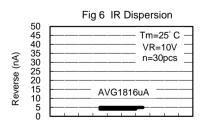


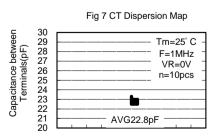
Fig. 3 Capacitance Between Terminals















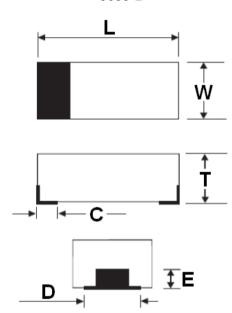
| ORDERING INFORMATION |              |                        |         |              |  |  |
|----------------------|--------------|------------------------|---------|--------------|--|--|
| PART NO.             | PACKING CODE | PACKING CODE<br>SUFFIX | PACKAGE | PACKING      |  |  |
| TSS0230LU            | RG           | G                      | 0603-B  | 4K / 7" Reel |  |  |

Note: Whole series with green compound

| EXAMPLE       |           |              |                        |                |  |  |
|---------------|-----------|--------------|------------------------|----------------|--|--|
| EXAMPLE P/N   | PART NO.  | PACKING CODE | PACKING CODE<br>SUFFIX | DESCRIPTION    |  |  |
| TSS0230LU RGG | TSS0230LU | RG           | G                      | Green compound |  |  |

### **PACKAGE OUTLINE DIMENSION**

0603-B



| DIM. | Unit (mm) |      |      | Unit (inch) |       |       |
|------|-----------|------|------|-------------|-------|-------|
|      | Min       | Тур. | Max  | Min         | Тур.  | Max   |
| L    | 1.60      | -    | 1.80 | 0.063       | 1     | 0.071 |
| W    | 0.80      | -    | 1.00 | 0.031       | 1     | 0.039 |
| Т    | 0.70      | -    | 0.85 | 0.028       | -     | 0.033 |
| С    | -         | 0.35 | -    | -           | 0.014 | -     |
| D    | -         | 0.70 | -    | -           | 0.028 | -     |
| Е    | -         | 0.30 | -    | -           | 0.012 | -     |





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