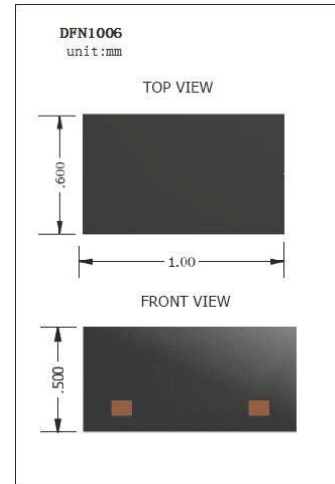


**200mA Schottky Barrier Diode - 30V****PRIMARY CHARACTERISTICS**

|                   |       |
|-------------------|-------|
| $V_R$             | 30V   |
| $I_O$             | 200mA |
| $V_F$ $I_F=200mA$ | 0.5V  |
| $T_{J,Max}$       | 125°C |

**FEATURES**

- Low current rectification
- Low forward voltage
- ROHS Compliant
- UL-94 V-0 / Green EMC
- Matte Tin Lead finish (Pb-Free)

**DFN1006 PACKAGE****MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )**

| Symbol      | Parameter                              | Value       | Units |
|-------------|----------------------------------------|-------------|-------|
| $P_D$       | Power Dissipation                      | 150         | mW    |
| $V_R$       | Reverse Voltage                        | 30          | V     |
| $I_{F(AV)}$ | Average Forward Current                | 200         | mA    |
| $I_{FSM}$   | Non-Repetitive Peak Forward Current *1 | 500         | mA    |
| $T_J$       | Junction Temperature                   | 125         | °C    |
| $T_{STG}$   | Storage Temperature                    | -55 to +125 | °C    |

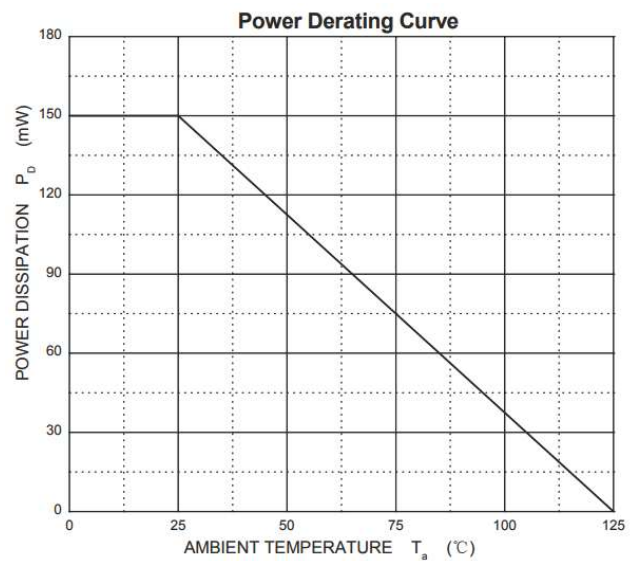
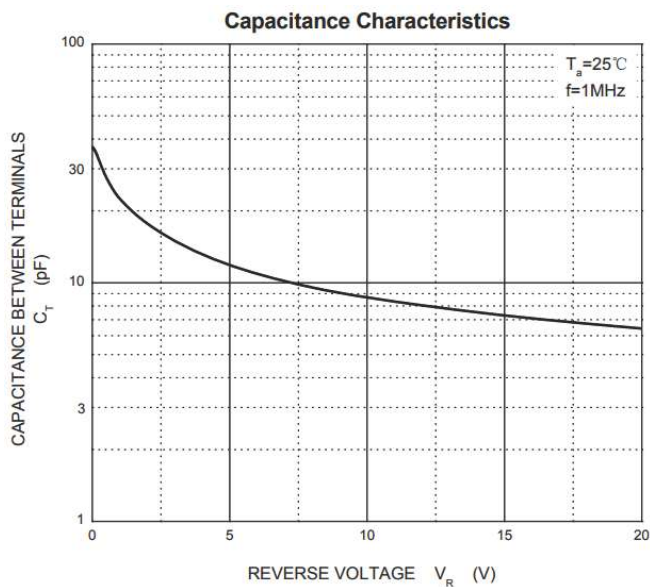
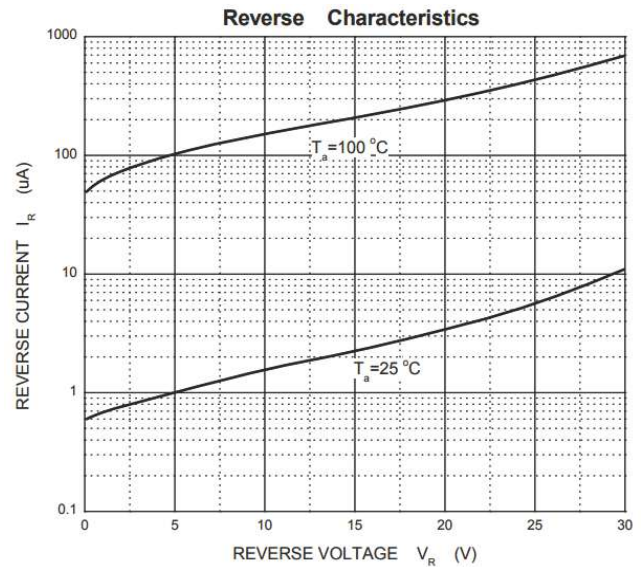
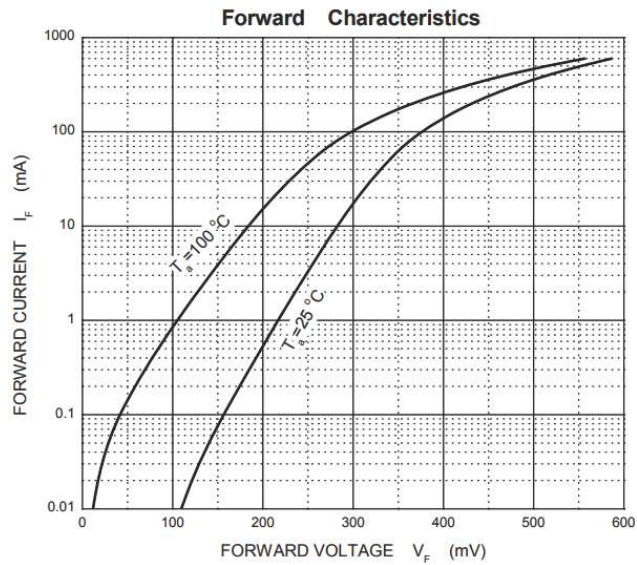
\*1: 8.3ms Single Half Sine-Wave

**ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$  unless otherwise noted)**

| Symbol | Parameter               | Conditions     | Min | Typ | Max  | Units   |
|--------|-------------------------|----------------|-----|-----|------|---------|
| $I_R$  | Reverse Leakage Current | $V_R=10V$      |     |     | 30   | $\mu A$ |
| $V_F$  | Forward Voltage         | $I_F=10mA$     |     |     | 0.35 | V       |
|        |                         | $I_F=200mA$    |     |     | 0.5  |         |
| $V_R$  | Reverse Voltage         | $I_R=100\mu A$ | 30  |     |      | V       |



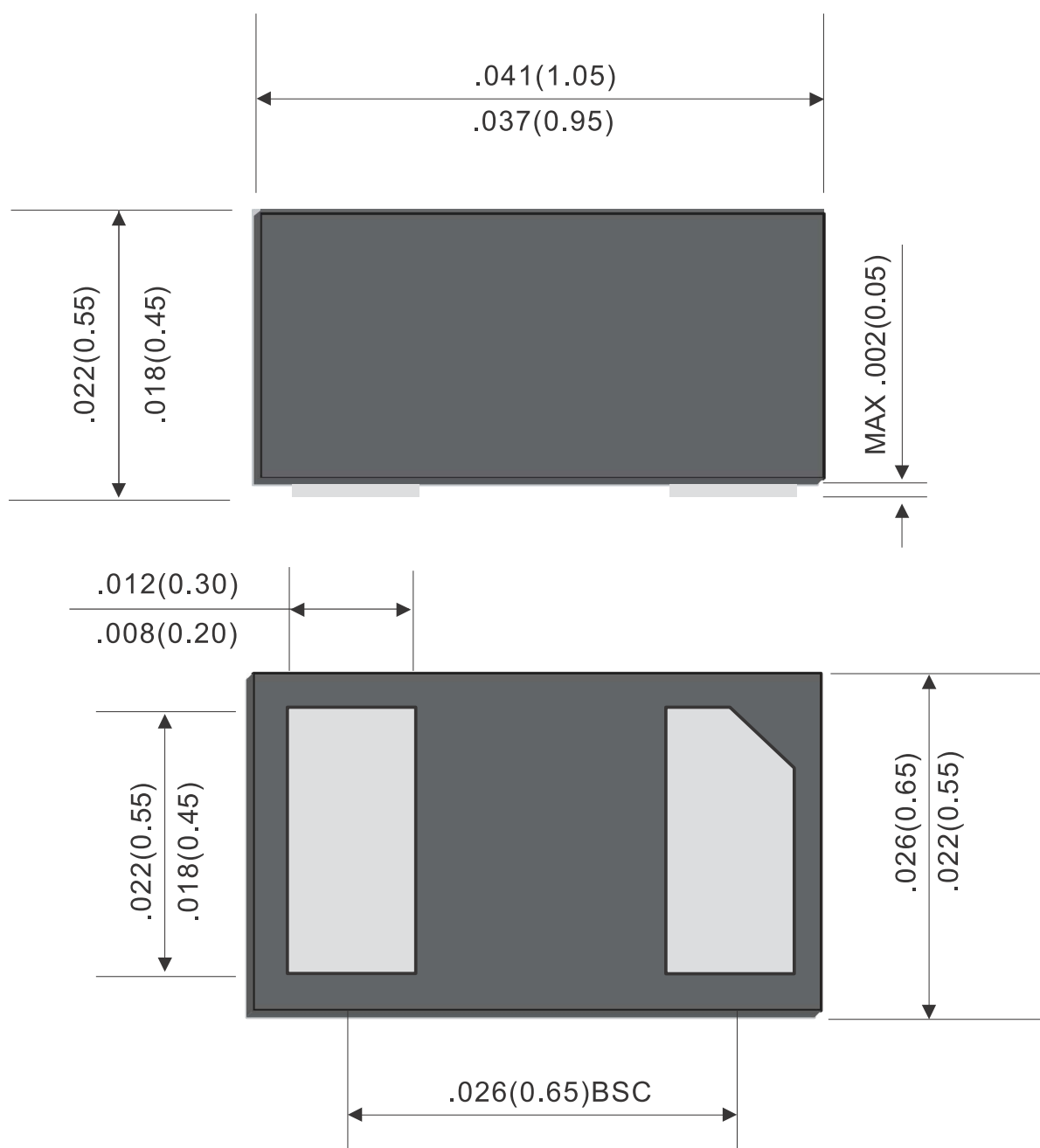
## Typical Characteristics





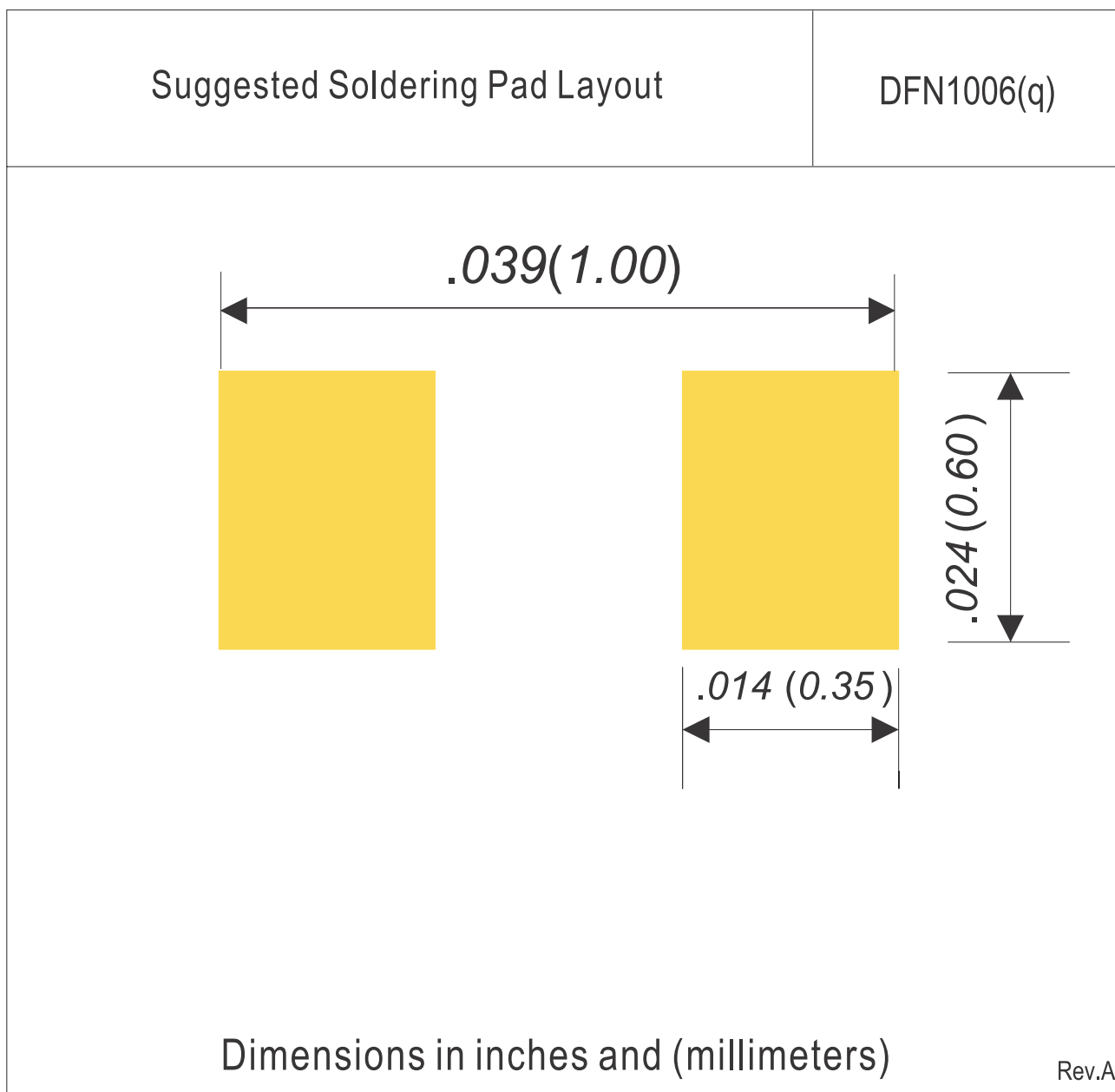
## Outline Drawing

DFN1006(q)



Dimensions in inches and (millimeters)

Rev.A

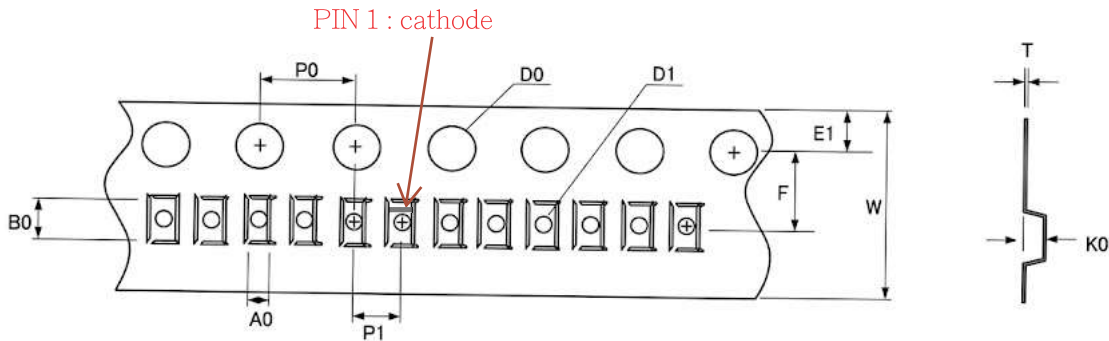




## 200mA Schottky Barrier Diode - 30V

### DFN1006

### Embossed Carrier Tape



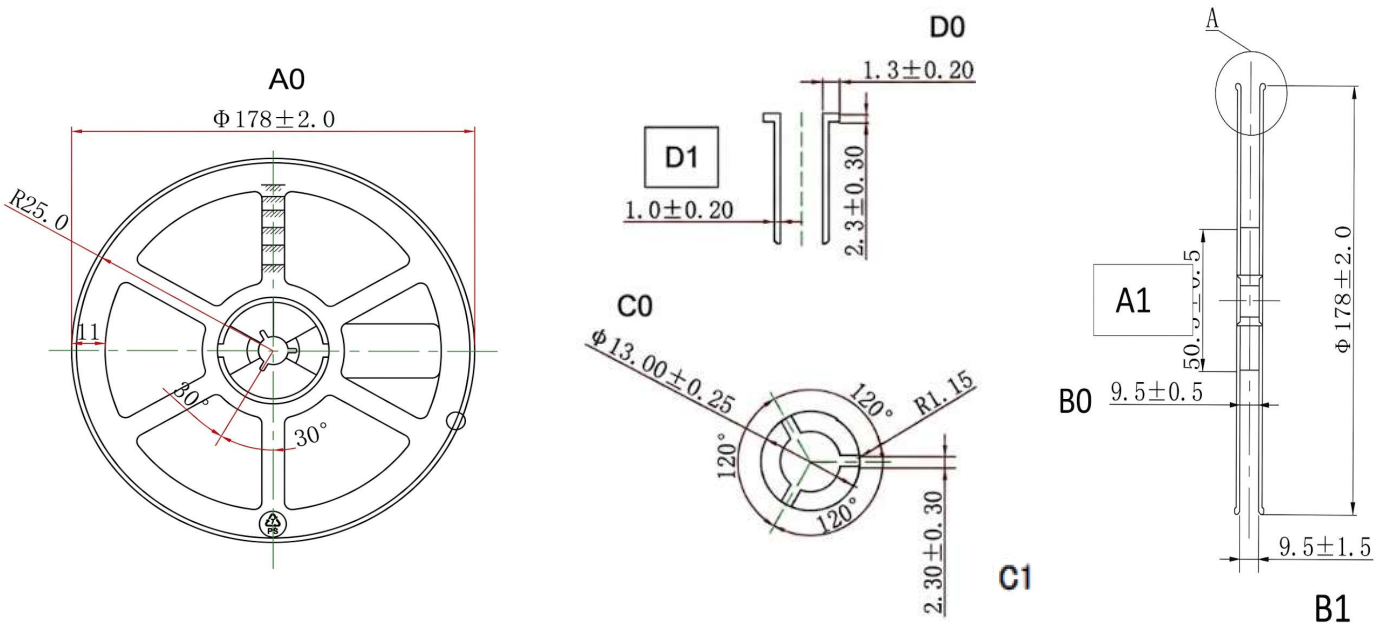
| ITEM | Dimensions (mm) |
|------|-----------------|
| A0   | 0.69 +/- 0.03   |
| B0   | 1.12 +/- 0.05   |
| W    | 8.0 +/- 0.2     |
| D0   | 1.55 +/- 0.05   |
| D1   | 0.50 +/- 0.05   |
| E1   | 1.75 +/- 0.10   |
| F    | 3.50 +/- 0.10   |
| P0   | 4.0 +/- 0.05    |
| P1   | 2.0 +/- 0.05    |
| K0   | 0.57 +/- 0.02   |
| T    | 0.20 +/- 0.020  |

#### Note :

- (1) Material : PC + ABS + PC (DENKA)  
Conductivity ( $\rho$ ) :  $10^5 \sim 10^9 \Omega$
- (2) Packing : 1,000 m MIN / Plastic Reel
- (3) Quality item of visual : Without the following defectiveness
  - Dirts more than 1 millimeter
  - Dust adhesion more than 1 millimeter
  - Transformation
  - Burr more than the dimensions clearance
  - Meandering
  - Other harmful defects
- (4) ICP data (RoHS) : Submit analysis data of the material regularly (yearly)

### DFN1006

### Reel



| ITEM            |     | A0  | A1   | B0   | B1   | C0    | C1  | D0  | D1  |
|-----------------|-----|-----|------|------|------|-------|-----|-----|-----|
| Dimensions (mm) | Min | 176 | 49.5 | 9.0  | 8.0  | 12.75 | 2.0 | 1.1 | 0.8 |
|                 | Max | 180 | 50.5 | 10.0 | 11.0 | 13.25 | 2.6 | 1.5 | 1.2 |

**Ordering Information:**

| Device PN                                                         | Marking <sup>(4)</sup> | Packing                 |
|-------------------------------------------------------------------|------------------------|-------------------------|
| SCS521BS-30T <sup>(1)</sup> 5H <sup>(2)</sup> - WS <sup>(3)</sup> | F                      | Tape&Reel: 10 Kpcs/Reel |

Note: (1) Packing code, Tape & Reel Packing

(2) Packing code suffix "G" for RoHS product ; Packing code Suffix "H" for halogen free product. All materials and products supplied comply with the U.S. Toxic Substances Control Act statement, PBT Chemicals.

(3) Willas brand abbreviation, Label Type does not display.

(4) There may be additional marking, which relates to the lot trace code information (data code and vendor code), the logo or the environmental category on the device.

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