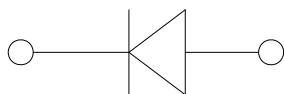
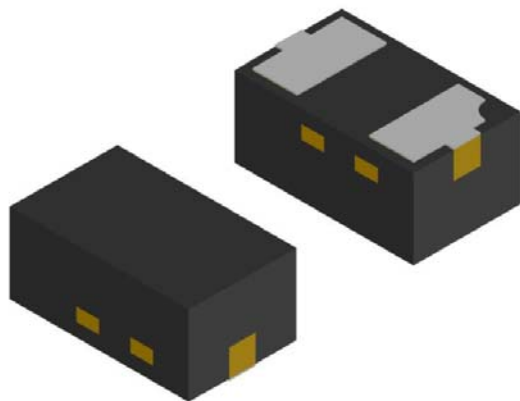


## Small Signal Schottky Diode



### Features

- Low Forward Voltage
- Epoxy Meets UL 94 V-0 Flammability Rating
- High Conductance
- Lead Free Finish/RoHS Compliant
- Small package saves board space
- Moisture Sensitivity Level 3
- $V_R$  30V
- $I_{FAV}$  100mA

### Mechanical Data

- **Package:** DFN1006-2L
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** SB

### ■Maximum Ratings ( $T_a=25^{\circ}\text{C}$ Unless otherwise specified)

| PARAMETER                                 | SYMBOL    | UNIT               | Conditions                     | VALUE      |
|-------------------------------------------|-----------|--------------------|--------------------------------|------------|
| Reverse voltage                           | $V_R$     | V                  |                                | 30         |
| Non-repetitive Peak forward surge current | $I_{FSM}$ | A                  | $t_p=8.3\text{ms}$ , half sine | 1          |
| Average forward current                   | $I_{FAV}$ | mA                 |                                | 100        |
| Power dissipation                         | $P_D$     | mW                 |                                | 100        |
| Junction temperature                      | $T_j$     | $^{\circ}\text{C}$ |                                | -65 ~ +125 |
| Storage temperature range                 | $T_{stg}$ | $^{\circ}\text{C}$ |                                | -65 ~ +125 |

### ■Electrical Characteristics ( $T_a=25^{\circ}\text{C}$ Unless otherwise specified)

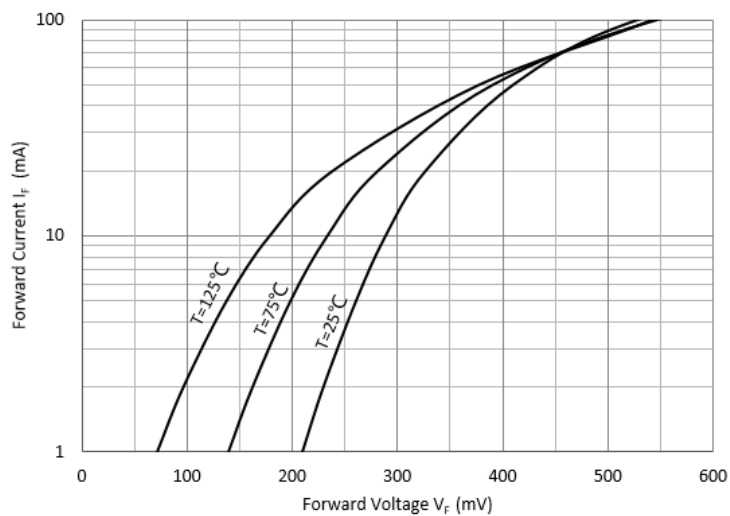
| PARAMETER               | Symbol | UNIT          | Conditions          | Min | Max  |
|-------------------------|--------|---------------|---------------------|-----|------|
| Breakdown Voltage       | $V_R$  | V             | $I_R=30\mu\text{A}$ | 30  |      |
| Forward Voltage         | $V_F$  | V             | $I_F=10\text{mA}$   |     | 0.35 |
| Reverse Leakage Current | $I_R$  | $\mu\text{A}$ | $V_R=10\text{V}$    |     | 10   |

### ■Ordering Information (Example)

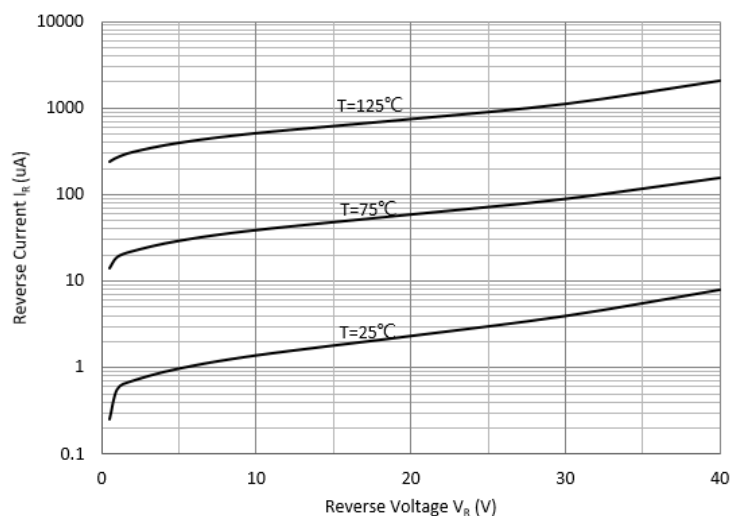
| PREFERRED P/N | UNIT WEIGHT(mg) | MINIIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|-----------------|-----------------------|-------------------------|----------------------------|---------------|
| DS521-30L2    | Approximate 0.9 | 10K                   | 100K                    | 400K                       | Tape & Reel   |

## ■ Characteristics (Typical)

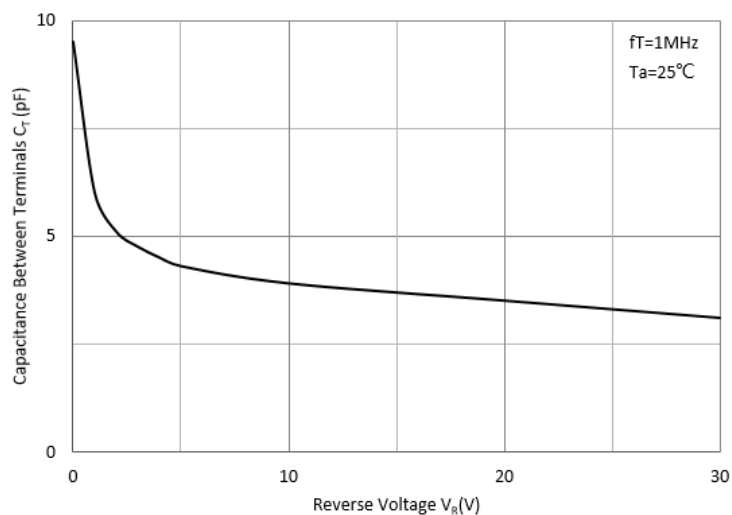
Forward Characteristics



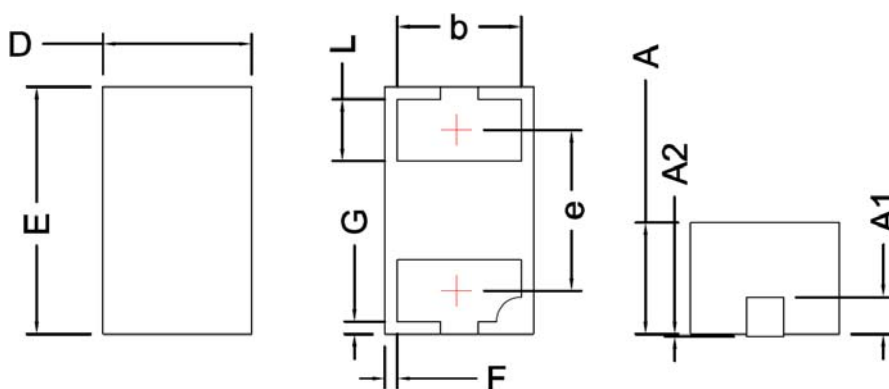
Reverse Characteristics



Capacitance Characteristics

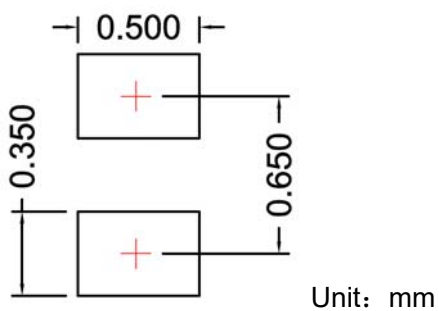


## ■ Outline Dimensions



| SYMBOL | MILLIMETER |      |      |
|--------|------------|------|------|
|        | MIN        | NOM  | MAX  |
| D      | 0.50       | 0.60 | 0.70 |
| E      | 0.90       | 1.00 | 1.10 |
| A      | 0.35       | 0.45 | 0.55 |
| A1     | 0.15 BSC   |      |      |
| A2     |            |      | 0.10 |
| F      | 0.005      |      |      |
| G      | 0.005      |      |      |
| L      | 0.15       | 0.25 | 0.35 |
| b      | 0.41       | 0.50 | 0.59 |
| e      | 0.65 BSC   |      |      |

## ■ Soldering Footprint





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