



LL700/LL700A

SMALL SIGNAL SCHOTTKY DIODES

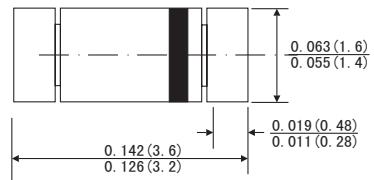
## FEATURES

- Low forward voltage drop
- Satisfactory wave detection efficiency
- Small temperature coefficient of forward characteristics
- Extremely low reverse current
- These products are ideal for use in ordinary wave detection and super high speed switching circuits
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

## MECHANICAL DATA

- Case: MiniMELF glass case
- Polarity: Color band denotes cathode end
- Weight: Approx. 0.05 gram

### MiniMELF



Dimensions in inches and (millimeters)

## ABSOLUTE RATINGS(LIMITING VALUES)

| Parameters                |        | Symbols | Value       | Units |
|---------------------------|--------|---------|-------------|-------|
| Reverse voltage           | LL700  | VR      | 15          | V     |
|                           | LL700A |         | 30          |       |
| Peak reverse voltage      | LL700  | VRM     | 15          | V     |
|                           | LL700A |         | 30          |       |
| Average rectified current |        | Io      | 30          | mA    |
| Peak forward current      |        | IFM     | 150         | mA    |
| Junction temperature      |        | TJ      | 125         | °C    |
| Storage temperature       |        | TSTG    | -55 to +125 | °C    |

## ELECTRICAL CHARACTERISTICS (TA= 25°C)

| Parameters            |                 | Symbols  | Test Conditions      | Min. | Typ. | Max. | Units |
|-----------------------|-----------------|--|----------------------|------|------|------|-------|
| Forward voltage(DC)   | LL700           | VF1  | I <sub>F</sub> =1mA  |      |      | 0.4  | V     |
|                       | LL700A          | VF2  | I <sub>F</sub> =30mA |      |      | 1    | V     |
| Reverse Current       | LL700           | IR   | V <sub>R</sub> =15V  |      |      | 100  | nA    |
|                       | LL700A          |  | V <sub>R</sub> =30V  |      |      | 150  |       |
| Junction Capacitance  | C <sub>J</sub>  | V <sub>R</sub> =1V f=1MHz  |                      | 1.3  |      |      | pF    |
| Rectifier efficiency  | η               | V <sub>in</sub> =3Vrms f=30MHz R <sub>L</sub> =3.9kΩ C <sub>L</sub> =10pF        |                      | 60   |      |      | %     |
| Reverse recovery time | t <sub>rr</sub> | I <sub>F</sub> =I <sub>r</sub> =10mA I <sub>rr</sub> =1mA, R <sub>L</sub> =100kΩ |                      |      | 1    |      | ns    |

Note: 1.Schottky barrier rectifier diode is sensitive to electric shock(static electricity, etc.).Due attention must be paid on charge of a human body and leakage from the equipment used.

# RATINGS AND CHARACTERISTICS CURVES LL700,LL700A

Figure 1. Forward voltage VS. forward current

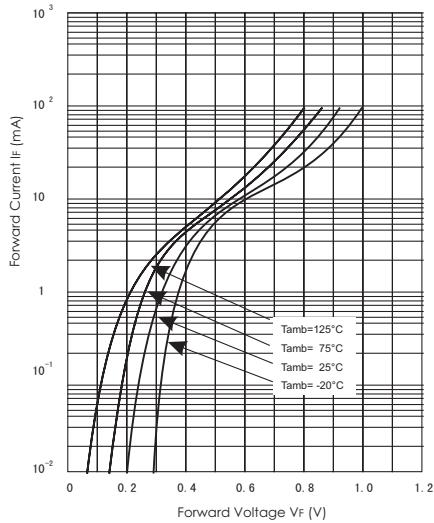


Figure 2. Forward voltage VS. Ambient Temperature

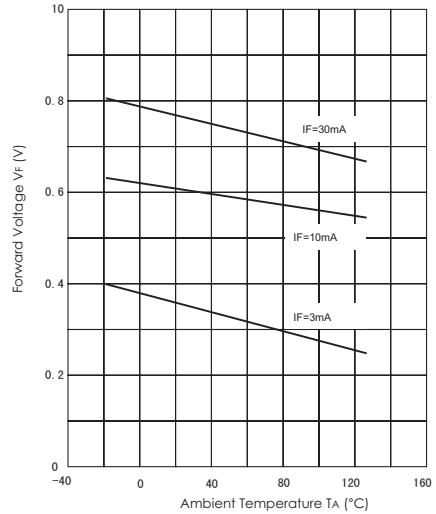


Figure 3. LL700 Reserse characteristics

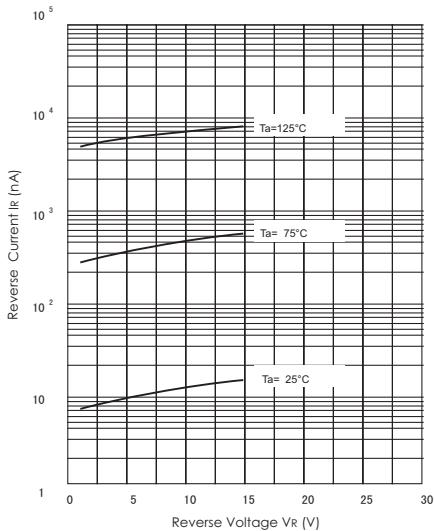


Figure 4. LL700 Junction Capacitance

