

### PRIMARY CHARACTERISTICS

| VRRM | I (AV) | VF(type) | I FSM | Tj max |
|------|--------|----------|-------|--------|
| 30V  | 200mA  | 0.35V    | 0.5A  | 125°C  |

### Features

- Low Forward Voltage Drop
- Small Surface Mounting Type
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode
- Weight: approx. 0.001g

### Mechanical Data

- SOD882 Package
- Polarity: Band indicates cathode
- Surface Mount Package

### Package Marking and Ordering Information

| Product ID | Pack   | Marking | Qty(PCS) |
|------------|--------|---------|----------|
| RB521S8-30 | SOD882 | F       | 10000    |



### Absolute Maximum Ratings (TC=25°C unless otherwise noted)

| Parameters                                                                         | Symbols | Limits   | Units |
|------------------------------------------------------------------------------------|---------|----------|-------|
| Maximum repetitive peak reverse voltage                                            | VRRM    | 30       | V     |
| Maximum RMS voltage                                                                | VRMS    | -        | V     |
| Maximum DC blocking voltage                                                        | VDC     | 30       | V     |
| Maximum average forward rectified current at TC=100 C                              | I(AV)   | 0.2      | A     |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | IFSM    | 0.5      | A     |
| Power Dissipation                                                                  | PD      | 150      | mW    |
| Operating junction temperature range                                               | TJ      | 125      | °C    |
| Storage temperature range                                                          | TSTG    | -55~+125 | °C    |

### Electrical Characteristics (TJ=25°C , unless otherwise noted)

| Parameter                                               | Symbols | Test Conditions | Min | Type | Max  | Units |
|---------------------------------------------------------|---------|-----------------|-----|------|------|-------|
| Maximum instantaneous forward voltage                   | VF      | IF=10mA         | -   | -    | 0.35 | V     |
|                                                         |         | IF=200mA        | -   | -    | 0.50 |       |
| Maximum DC reverse current at rated DC blocking voltage | IR      | VR=10V          | -   | -    | 30   | uA    |

## RATING AND CHARACTERISTIC CURVES

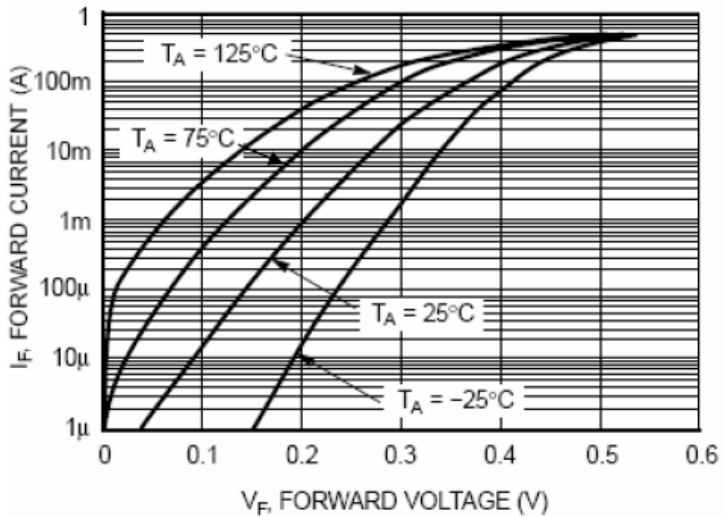


Figure 1. Forward Characteristics

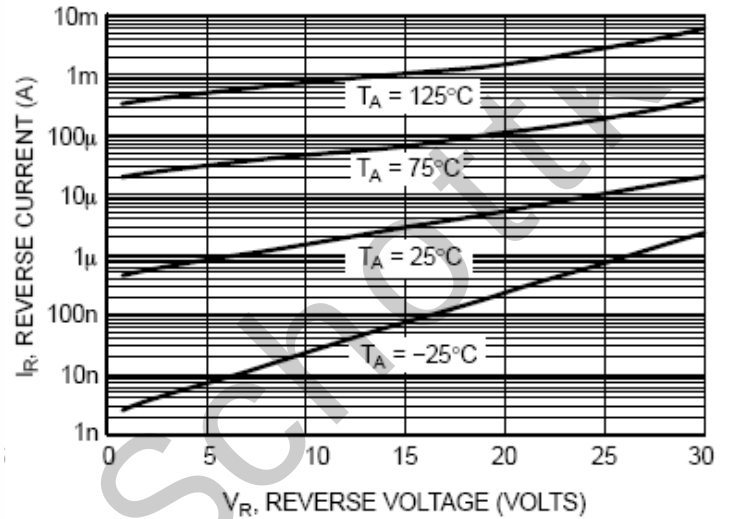


Figure 2. Reverse Characteristics

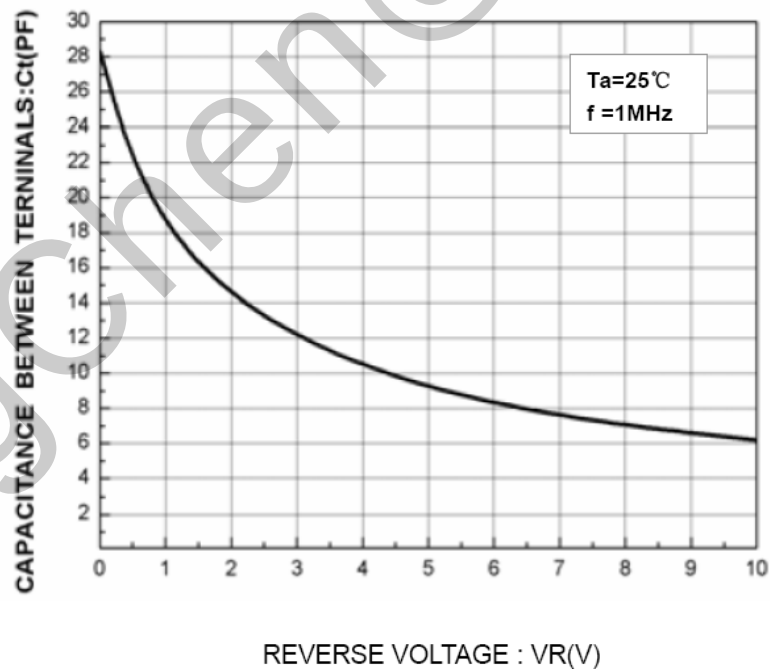
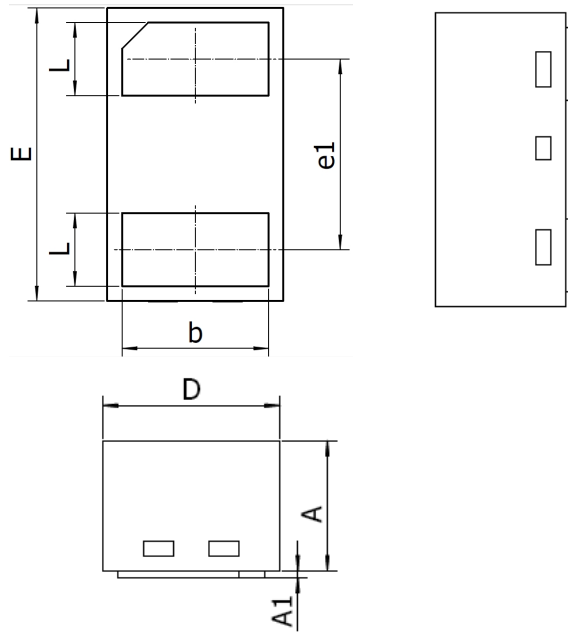


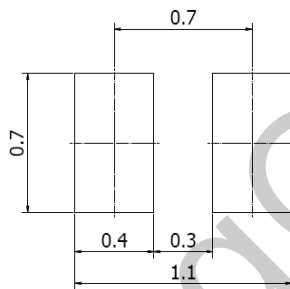
Figure3.Total Capacitance

## SOD882 Package Outline



| DIM | MILLIMETERS |      | INCHES     |       |
|-----|-------------|------|------------|-------|
|     | MIN         | MAX  | MIN        | MAX   |
| A   | 0.46        | 0.50 | 0.018      | 0.020 |
| A1  | ---         | 0.03 | ---        | 0.001 |
| b   | 0.45        | 0.55 | 0.018      | 0.022 |
| D   | 0.55        | 0.65 | 0.022      | 0.026 |
| E   | 0.95        | 1.05 | 0.037      | 0.041 |
| e1  | Typ. 0.65   |      | Typ. 0.026 |       |
| L   | 0.20        | 0.30 | 0.008      | 0.012 |

## Typical Soldering Pattern(mm):



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### Head Office

#### Contact Information:

DongChen Electronics Co.,Ltd.

Address: 2F., No.407, Sec. 2, Longgang Rd.,Zhongli Dist.,  
Taoyuan City 32097, Taiwan (R.O.C.)

Tel: 03-284-1808

Fax: 03-284-1404

Mail:dc@dongchen.com.tw

Web:www.dongchen.com.tw