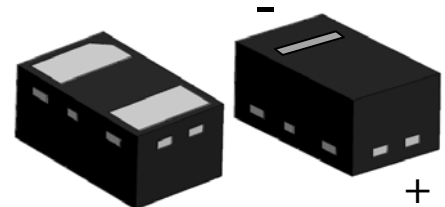


SOD-882 Plastic Package Fast Switching Diode

Green Product



SOD882 Package



Absolute Maximum Ratings T_A = 25°C unless otherwise noted

| Symbol | Parameter | Value | Units |
|------------------|---|-------------|-------|
| P _D | Power Dissipation | 125 | mW |
| T _{STG} | Storage Temperature Range | -55 to +125 | °C |
| T _J | Operating Junction Temperature | +125 | °C |
| V _{RRM} | Repetitive Peak Reverse Voltage | 100 | V |
| V _R | DC Reverse Voltage | 75 | V |
| I _O | Average Forward Current | 150 | mA |
| I _{FSM} | Non-repetitive Peak Forward Surge Current (Pulse Width=1us) | 2 | A |

These ratings are limiting values above which the serviceability of the diode may be impaired.

Specification Features:

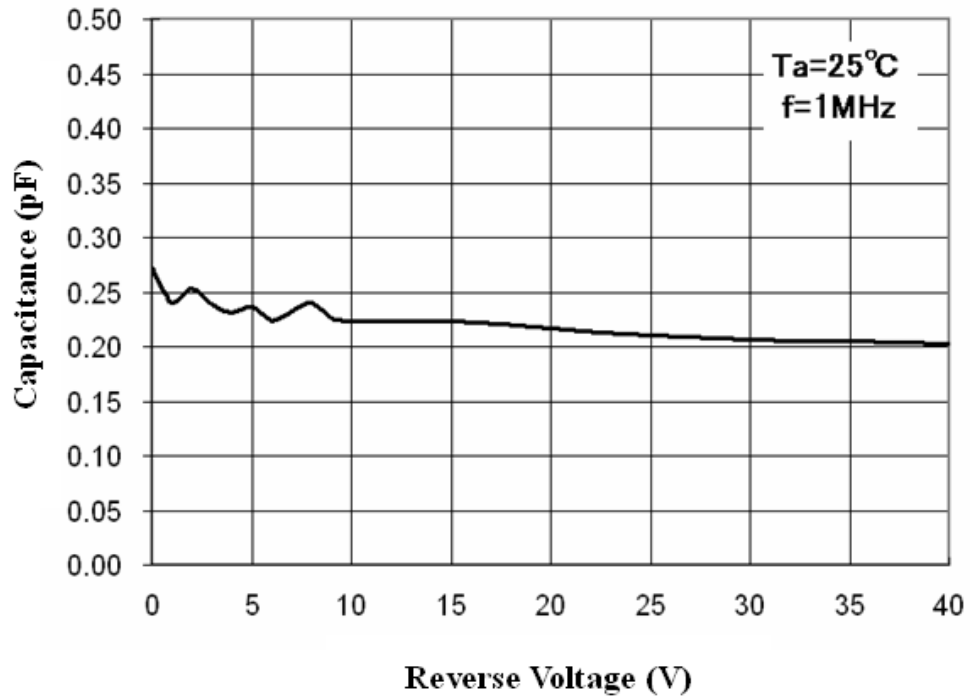
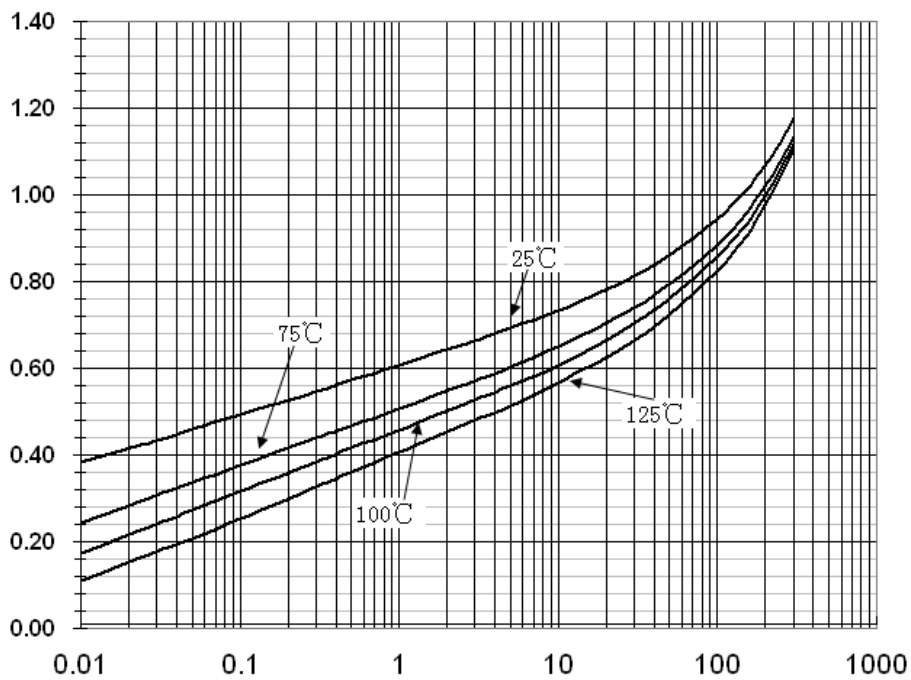
- High Speed Switching (T_{RR} < 4.0 nS)
- Small Surface Mounting Type (DFN1006)
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode
- Weight: approx. 0.001g

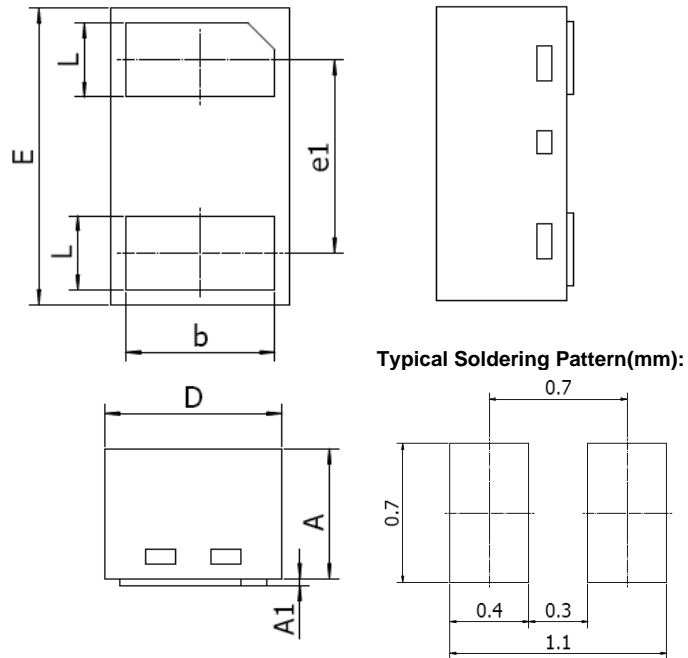
DEVICE MARKING CODES:

| Device Type | Marking | Shipping |
|-------------|---------|--------------------|
| CDSQR4148 | S3 | 10,000/Tape & Reel |

Electrical Characteristics T_A = 25°C unless otherwise noted

| Symbol | Parameter | Test Condition | Limits | | Unit |
|-----------------|-------------------------|--|--------|-----|-------|
| | | | Min | Max | |
| B _V | Breakdown Voltage | I _R =100µA | 100 | | Volts |
| | | I _R =5µA | 75 | | |
| I _R | Reverse Leakage Current | V _R =20V | | 25 | nA |
| | | V _R =75V | | 5 | µA |
| V _F | Forward Voltage | I _F =10mA | | 1.0 | Volts |
| T _{RR} | Reverse Recovery Time | I _F =10mA, I _R =60mA, R _L =100Ω, I _{RR} =1mA | | 4 | nS |
| C | Capacitance | V _R =0V, f=1MHz | | 4 | pF |

Typical Performance Characteristics
Total Capacitance

Forward Voltage vs Ambient Temperature


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 |

NOTICE

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The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Tak Cheong Semiconductor Co., Ltd., or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

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