SURFACE MOUNT SILICON HIGH CURRENT LOW V_F SCHOTTKY DIODE



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMDSH2-4L is a high current, low V_F, 40 Volt Schottky diode packaged in a space saving SOD-323 surface mount case. This device has been designed for small signal general purpose applications when small size and operational efficiency are prime requirements.

MARKING CODE: S2L



SOD-323 CASE

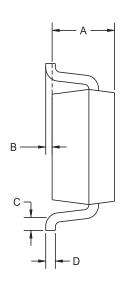
| MAXIMUM RATINGS: (T _A =25°C) | SYMBOL | | UNITS |
|--|-----------------------------------|-------------|-------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 40 | V |
| Continuous Forward Current | l _F | 200 | mA |
| Peak Forward Surge Current, tp=1.0ms | I _{FSM} | 1.0 | Α |
| Power Dissipation | P_{D} | 250 | mW |
| Operating and Storage Junction Temperature | T _J , T _{stg} | -65 to +150 | °C |
| Thermal Resistance | $\Theta_{\sf JA}$ | 500 | °C/W |

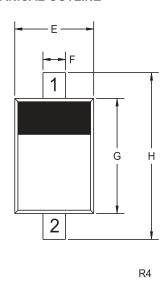
| ELECTRICAL CHARACTERISTICS: (T _A =25°C unless otherwise noted) | | | | | | | | |
|--|--|-----|------|-------|-------|--|--|--|
| SYMBOL | TEST CONDITIONS | MIN | ΤΫ́Ρ | MAX | UNITS | | | |
| I_{R} | V _R =20V | | 11 | 50 | μA | | | |
| BV_R | I _R =100μA | 40 | 53 | | V | | | |
| V_{F} | I _F =10mA | | 0.24 | 0.325 | V | | | |
| V_{F} | I _F =100mA | | 0.35 | 0.4 | V | | | |
| V_{F} | I _F =200mA | | 0.42 | 0.5 | V | | | |
| C_{J} | V_R =4.0V, f=1.0MHz | | 8.5 | 10 | pF | | | |
| t _{rr} | $I_F = I_R = 10 \text{mA}, I_{rr} = 1.0 \text{mA}, R_L = 100 \Omega$ | | 4.0 | 5.0 | ns | | | |

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SOD-323 CASE - MECHANICAL OUTLINE





LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: S2L

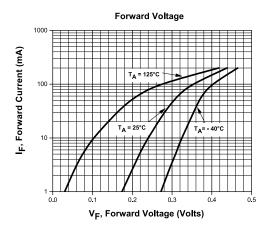
| DIMENSIONS | | | | | | | |
|--------------------|--------|-------|-------------|------|--|--|--|
| | INCHES | | MILLIMETERS | | | | |
| SYMBOL | MIN | MAX | MIN | MAX | | | |
| Α | 0.031 | 0.039 | 0.80 | 1.00 | | | |
| В | 0.000 | 0.004 | 0.00 | 0.10 | | | |
| С | 0.008 | - | 0.20 | - | | | |
| D | 0.004 | 0.007 | 0.11 | 0.19 | | | |
| E | 0.045 | 0.053 | 1.15 | 1.35 | | | |
| F | - | 0.014 | - | 0.35 | | | |
| G | 0.063 | 0.071 | 1.60 | 1.80 | | | |
| Н | 0.094 | 0.102 | 2.40 | 2.60 | | | |
| 00D 000 (DE) (DA) | | | | | | | |

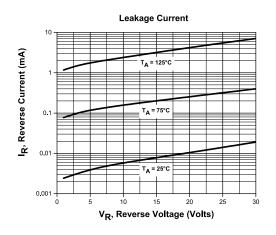
SOD-323 (REV: R4)

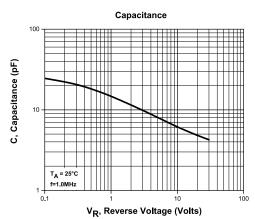
SURFACE MOUNT SILICON HIGH CURRENT LOW $V_{\mbox{\scriptsize F}}$ SCHOTTKY DIODE

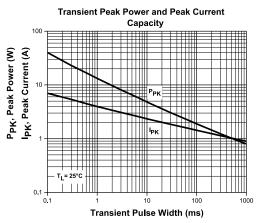


TYPICAL ELECTRICAL CHARACTERISTICS





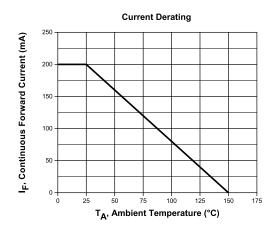


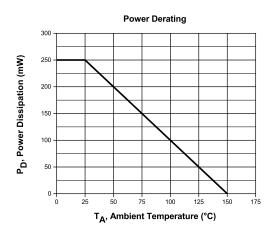






TYPICAL ELECTRICAL CHARACTERISTICS





OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- · Inventory bonding
- · Consolidated shipping options

- · Custom bar coding for shipments
- · Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free guick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- · Custom electrical curves
- · Environmental regulation compliance
- · Customer specific screening
- · Up-screening capabilities

- · Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- · Custom product and package development

REQUESTING PRODUCT PLATING

- 1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA

Main Tel: (631) 435-1110 Main Fax: (631) 435-1824

Support Team Fax: (631) 435-3388

www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

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