SURFACE MOUNT SILICON HIGH VOLTAGE SCHOTTKY DIODE



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMAD6263 is a high voltage Schottky diode designed for applications where very small size and operational efficiency are prime requirements.

MARKING CODE: J



SOD-923 CASE

APPLICATIONS:

- DC-DC Converters
- Voltage Clamping
- Protection Circuits
- Battery powered applications including Cell Phones, Digital Cameras, Pagers, PDAs, Laptop, Computers, etc.

FEATURES:

- Current (I_E=15mA)
- Low Forward Voltage Drop (V_F=0.395V TYP @ 1.0mA)
- Low Reverse Current (98nA TYP @ 50V)
- Extremely Fast Switching (5ns Max)
- Miniture, 0.8 x 0.6 x 0.4mm, ultra low height profile Surface Mount Package.

| MAXIMUM RATINGS: (T _A =25°C) | SYMBOL | | UNITS |
|---|-------------------|-------------|-------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 70 | V |
| Continuous Forward Current | Ι _Ε | 15 | mA |
| Peak Forward Surge Current, tp=1.0s | I _{FSM} | 50 | mA |
| Power Dissipation | P_{D} | 100 | mW |
| Operating Junction Temperature | TJ | -65 to +125 | °C |
| Storage Temperature | T _{stg} | -65 to +150 | °C |
| Thermal Resistance | $\Theta_{\sf JA}$ | 1000 | °C/W |
| | | | |

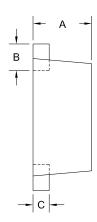
ELECTRICAL CHARACTERISTICS: $(T_A=25^{\circ}C)$

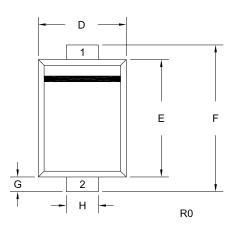
| SYMBOL | IEST CONDITIONS | MIN | IYP | MAX | UNITS |
|-----------------|---|-----|-----|-----|-------|
| I_{R} | V _R =50V | | 10 | 200 | nA |
| BV_R | I _R =10μA | 70 | | | V |
| V_{F} | I _F =1.0mA | | 395 | 410 | mV |
| CJ | V _R =0, f=1.0MHz | | | 2.0 | pF |
| t _{rr} | $I_R = I_F = 10$ mA, $I_{rr} = 1.0$ mA, $R_L = 100$ Ω | | | 5.0 | ns |

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SOD-923 CASE - MECHANICAL OUTLINE





LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: J

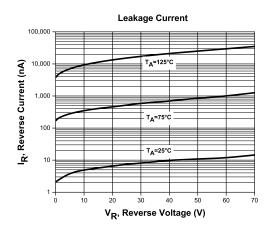
| DIMENSIONS | | | | | | | |
|------------|--------|-------|-------------|------|--|--|--|
| | INCHES | | MILLIMETERS | | | | |
| SYMBOL | MIN | MAX | MIN | MAX | | | |
| Α | 0.015 | 0.016 | 0.39 | 0.41 | | | |
| В | 0.004 | 0.010 | 0.10 | 0.26 | | | |
| С | 0.003 | 0.006 | 0.08 | 0.14 | | | |
| D | 0.022 | 0.026 | 0.55 | 0.65 | | | |
| Е | 0.030 | 0.033 | 0.75 | 0.85 | | | |
| F | 0.035 | 0.043 | 0.90 | 1.10 | | | |
| G | 0.002 | 0.006 | 0.05 | 0.15 | | | |
| Н | 0.007 | 0.011 | 0.17 | 0.27 | | | |

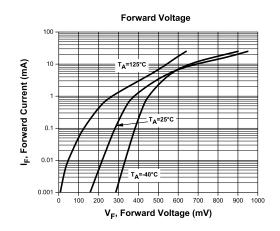
SOD-923 (REV: R0)

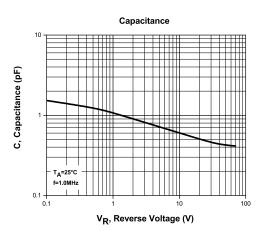


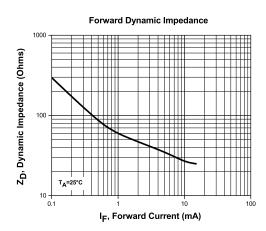


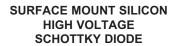
TYPICAL ELECTRICAL CHARACTERISTICS





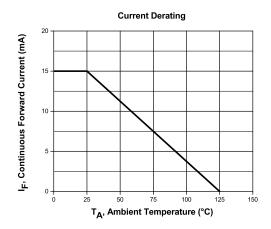


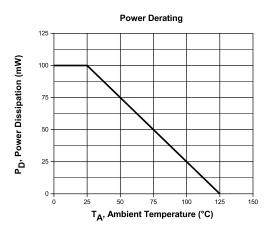






TYPICAL ELECTRICAL CHARACTERISTICS





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

Worldwide Distributors:

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