CMOD2004

SURFACE MOUNT HIGH VOLTAGE SILICON SWITCHING DIODE



www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMOD2004 type is a high voltage silicon switching diode manufactured by the epitaxial planar process, epoxy molded in a ULTRAmini™ surface mount package, designed for applications requiring high voltage capability.

MARKING CODE: 04



SOD-523 CASE

| MAXIMUM RATINGS: (T _A =25°C) | SYMBOL | | UNITS |
|--|-----------------------------------|-------------|-------|
| Continuous Reverse Voltage | V_{R} | 240 | V |
| Peak Repetitive Reverse Voltage | V_{RRM} | 300 | V |
| Average Forward Current | IO | 200 | mA |
| Continuous Forward Current | l _F | 225 | mA |
| Peak Repetitive Forward Current | I _{FRM} | 625 | mA |
| Peak Forward Surge Current, tp=1.0μs | I _{FSM} | 4.0 | Α |
| Peak Forward Surge Current, tp=1.0s | IFSM | 1.0 | Α |
| Power Dissipation | P_{D} | 250 | mW |
| Operating and Storage Junction Temperature | T _J , T _{stg} | -65 to +150 | °C |
| Thermal Resistance | Θ_{JA} | 500 | °C/W |

$\textbf{ELECTRICAL CHARACTERISTICS:} \ (T_{\mbox{\scriptsize A}} = 25 \ ^{\circ}\mbox{C unless otherwise noted})$

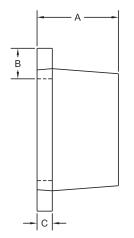
| SYMBOL | TEST CONDITIONS | MIN | MAX | UNIT |
|-----------------|---|-----|-----|------|
| I_{R} | V _R =240V | | 100 | nA |
| I_{R} | V _R =240V, T _A =150°C | | 100 | μΑ |
| BV_R | I _R =100μA | 300 | | V |
| V_{F} | I _F =100mA | | 1.0 | V |
| C _T | V _R =0, f=1.0MHz | | 5.0 | pF |
| t _{rr} | $I_F=I_R=30$ mA, $I_{rr}=3.0$ mA, $R_L=100\Omega$ | | 50 | ns |

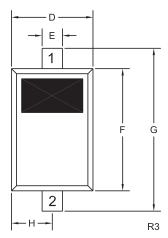
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SOD-523 CASE - MECHANICAL OUTLINE





LEAD CODE:

- 1) Cathode 2) Anode

MARKING CODE: 04

| DIMENSIONS | | | | | | | |
|-------------------|--------|-------|-------------|------|--|--|--|
| | INCHES | | MILLIMETERS | | | | |
| SYMBOL | MIN | MAX | MIN | MAX | | | |
| A | 0.020 | 0.031 | 0.50 | 0.80 | | | |
| В | 0.008 | 0.016 | 0.20 | 0.40 | | | |
| С | 0.002 | 0.008 | 0.05 | 0.20 | | | |
| D | 0.028 | 0.035 | 0.70 | 0.90 | | | |
| E | 0.008 | 0.014 | 0.20 | 0.35 | | | |
| F | 0.039 | 0.055 | 1.00 | 1.40 | | | |
| G | 0.055 | 0.071 | 1.40 | 1.80 | | | |
| Н | 0.016 | | 0.40 | | | | |
| SOD-523 (REV: R3) | | | | | | | |

R5 (11-April 2011)

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

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