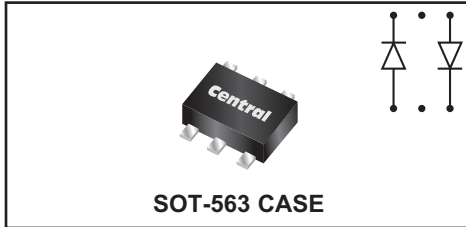


CMLSH-4DO**SURFACE MOUNT SILICON
DUAL, ISOLATED OPPOSING
SCHOTTKY DIODE**
www.centrasemi.com
DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMLSH-4DO are two individual electrically isolated 40 volt Schottky diodes of opposing polarity, in a space saving SOT-563 surface mount package. This device has been designed for applications requiring fast switching speeds and a low forward voltage drop.

MARKING CODE: L40**SOT-563 CASE****MAXIMUM RATINGS:** ($T_A=25^\circ\text{C}$)

| | | | |
|---|----------------|-------------|--------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 40 | V |
| Continuous Forward Current | I_F | 200 | mA |
| Peak Repetitive Forward Current | I_{FRM} | 350 | mA |
| Peak Forward Surge Current, $t_p=10\text{ms}$ | I_{FSM} | 750 | mA |
| Power Dissipation | P_D | 250 | mW |
| Operating and Storage Junction Temperature | T_J, T_{stg} | -65 to +150 | $^\circ\text{C}$ |
| Thermal Resistance | Θ_{JA} | 500 | $^\circ\text{C/W}$ |

SYMBOL

| SYMBOL | UNITS |
|----------------|--------------------|
| V_{RRM} | V |
| I_F | mA |
| I_{FRM} | mA |
| I_{FSM} | mA |
| P_D | mW |
| T_J, T_{stg} | $^\circ\text{C}$ |
| Θ_{JA} | $^\circ\text{C/W}$ |

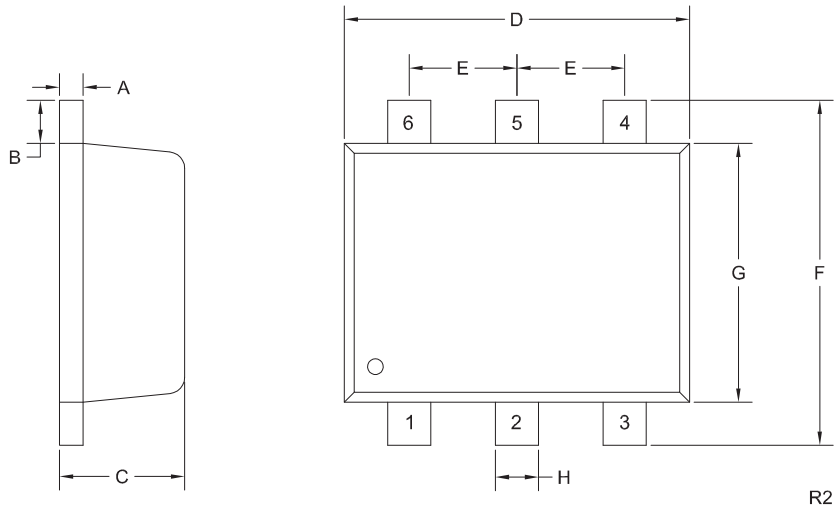
UNITS**ELECTRICAL CHARACTERISTICS PER DIODE:** ($T_A=25^\circ\text{C}$ unless otherwise noted)

| SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|----------|---|-----|------|------|---------------|
| I_R | $V_R=25\text{V}$ | | 90 | 500 | nA |
| I_R | $V_R=25\text{V}, T_A=100^\circ\text{C}$ | | 25 | 100 | μA |
| BV_R | $I_R=100\mu\text{A}$ | 40 | 50 | | V |
| V_F | $I_F=2.0\text{mA}$ | | 0.29 | 0.33 | V |
| V_F | $I_F=15\text{mA}$ | | 0.37 | 0.42 | V |
| V_F | $I_F=100\text{mA}$ | | 0.51 | 0.80 | V |
| V_F | $I_F=200\text{mA}$ | | 0.65 | 1.0 | V |
| C_J | $V_R=1.0\text{V}, f=1.0\text{MHz}$ | | 7.0 | | pF |
| t_{rr} | $I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$ | | | 5.0 | ns |

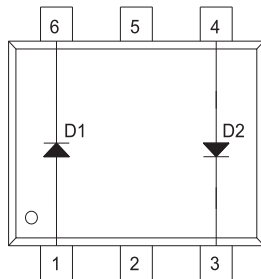
CMLSH-4DO
SURFACE MOUNT SILICON
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SCHOTTKY DIODE



SOT-563 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



| SYMBOL | INCHES | | MILLIMETERS | |
|--------|--------|-------|-------------|------|
| | MIN | MAX | MIN | MAX |
| A | 0.0027 | 0.007 | 0.07 | 0.18 |
| B | 0.008 | | 0.20 | |
| C | 0.017 | 0.024 | 0.45 | 0.60 |
| D | 0.059 | 0.067 | 1.50 | 1.70 |
| E | 0.020 | | 0.50 | |
| F | 0.059 | 0.067 | 1.50 | 1.70 |
| G | 0.043 | 0.051 | 1.10 | 1.30 |
| H | 0.006 | 0.012 | 0.15 | 0.30 |

SOT-563 (REV: R2)

LEAD CODE:

- 1) Anode D1
- 2) NC
- 3) Cathode D2
- 4) Anode D2
- 5) NC
- 6) Cathode D1

MARKING CODE: L40

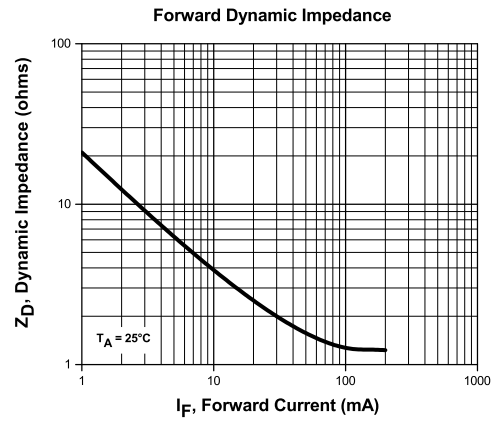
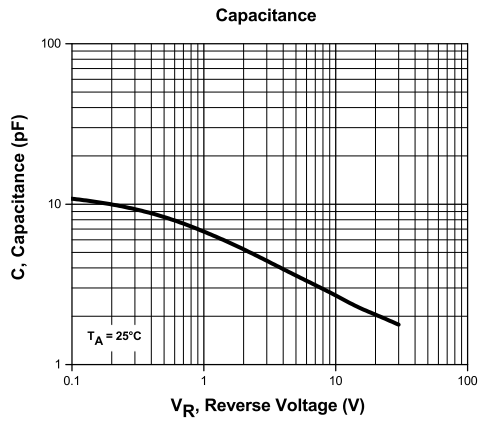
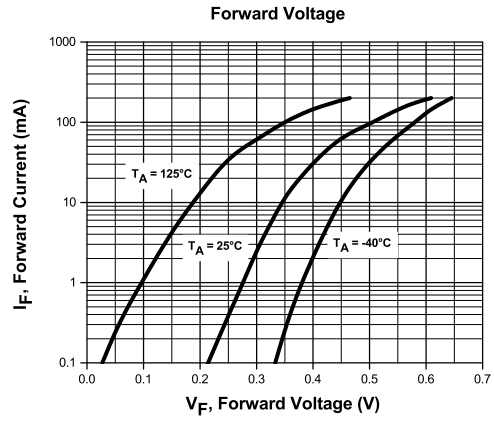
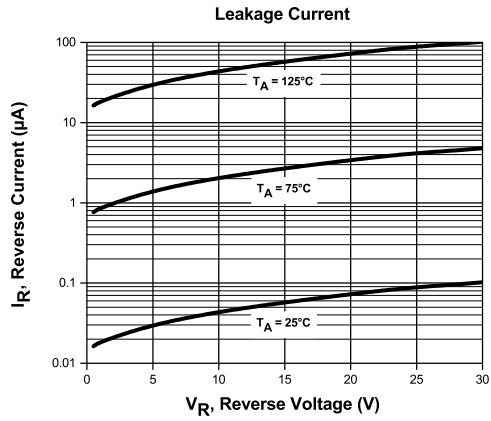
R6 (16-February 2016)

CMLSH-4DO

SURFACE MOUNT SILICON
DUAL, ISOLATED OPPOSING
SCHOTTKY DIODE



TYPICAL ELECTRICAL CHARACTERISTICS



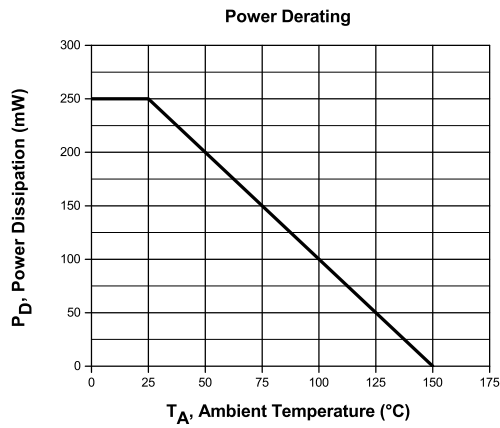
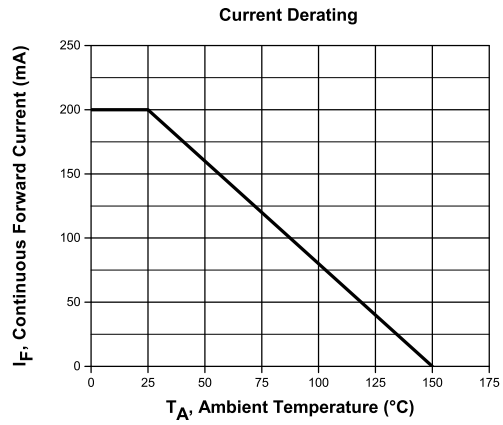
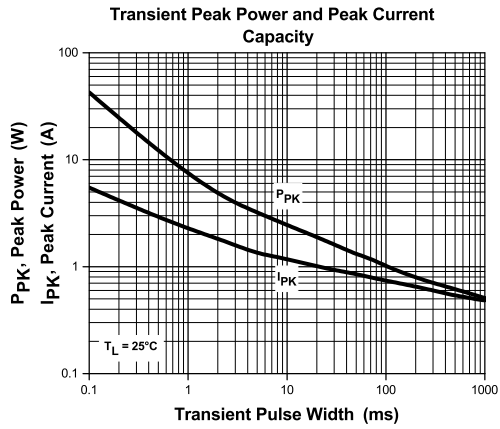
R6 (16-February 2016)

CMLSH-4DO

SURFACE MOUNT SILICON
DUAL, ISOLATED OPPOSING
SCHOTTKY DIODE



TYPICAL ELECTRICAL CHARACTERISTICS



R6 (16-February 2016)

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 quick 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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