

CMLD6263A  
CMLD6263C  
CMLD6263S

**SURFACE MOUNT PICOmini™  
DUAL PAIR, HIGH VOLTAGE  
SILICON SCHOTTKY DIODES**

**PICOmini™**



**SOT-563 CASE**

**Central™  
Semiconductor Corp.**

**FEATURES:**

- HIGH VOLTAGE (70V)
- LOW FORWARD VOLTAGE
- VARIOUS DUAL PAIR CONFIGURATIONS

CMLD6263A Dual Pair, Common Anode  
CMLD6263C Dual Pair, Common Cathode  
CMLD6263S Dual Pair, In Series

**Marking Code: 63A**  
**Marking Code: 63C**  
**Marking Code: 63S**

**DESCRIPTION:**

The Central Semiconductor CMLD6263 Series incorporates two pair, high voltage, low  $V_F$  Silicon Diodes in a space saving SOT-563 surface mount package. These diodes are designed for fast switching applications requiring a low forward voltage drop.

**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

|                                    | <u>SYMBOL</u>  |             | <u>UNITS</u>              |
|------------------------------------|----------------|-------------|---------------------------|
| Peak Repetitive Reverse Voltage    | $V_{RRM}$      | 70          | V                         |
| Continuous Forward Current         | $I_F$          | 15          | mA                        |
| Forward Surge Current, $t_p=1.0$ s | $I_{FSM}$      | 50          | mA                        |
| Power Dissipation                  | $P_D$          | 250         | mW                        |
| Operating and Storage              |                |             |                           |
| Junction Temperature               | $T_J, T_{stg}$ | -65 to +150 | $^\circ\text{C}$          |
| Thermal Resistance                 | $\theta_{JA}$  | 500         | $^\circ\text{C}/\text{W}$ |

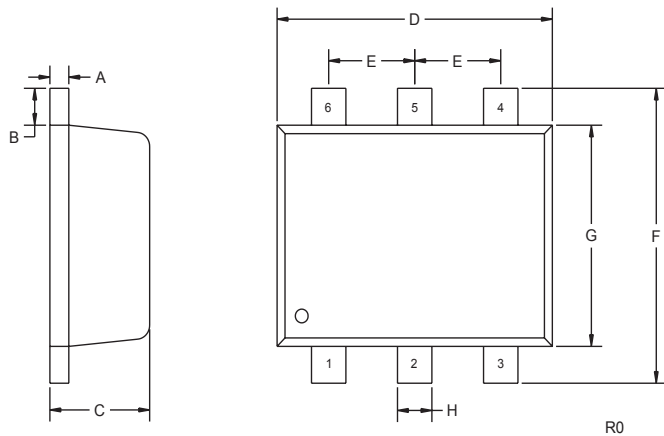
**ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_A=25^\circ\text{C}$ )

| <u>SYMBOL</u> | <u>TEST CONDITIONS</u>                                    | <u>MIN</u> | <u>TYP</u> | <u>MAX</u> | <u>UNITS</u> |
|---------------|---|------------|------------|------------|--------------|
| $I_R$         | $V_R=50\text{V}$  |            | 98         | 200        | nA           |
| $BV_R$        | $I_R=10\mu\text{A}$                                       | 70         |            |            | V            |
| $V_F$         | $I_F=1.0\text{mA}$  |            | 395        | 410        | mV           |
| $C_T$         | $V_R=0\text{V}, f=1.0\text{MHz}$                          |            |            | 2.0        | pF           |
| $t_{rr}$      | $I_R=I_F=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$ |            |            | 5.0        | ns           |

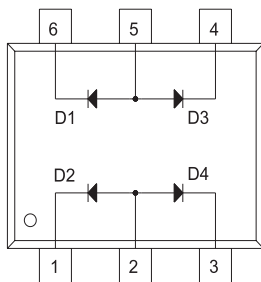
**SOT-563 CASE - MECHANICAL OUTLINE**

| SYMBOL | DIMENSIONS |       |             |      |
|--------|------------|-------|-------------|------|
|        | INCHES     |       | MILLIMETERS |      |
| A      | 0.004      | 0.007 | 0.10        | 0.18 |
| B      | 0.008      |       | 0.20        |      |
| C      | 0.022      | 0.024 | 0.56        | 0.60 |
| D      | 0.059      | 0.067 | 1.50        | 1.70 |
| E      | 0.020      |       | 0.50        |      |
| F      | 0.061      | 0.067 | 1.55        | 1.70 |
| G      | 0.047      |       | 1.20        |      |
| H      | 0.006      | 0.012 | 0.15        | 0.30 |

SOT-563 (REV: R0)



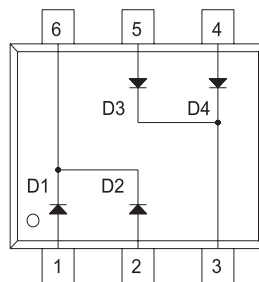
**Pin Configuration**



**CMLD6263A**  
**Marking Code: 63A**

**Lead Code:**

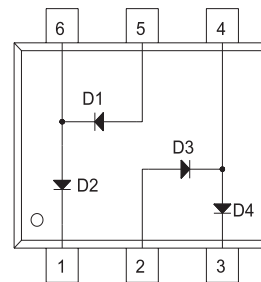
- 1) Cathode D2
- 2) Anode D2, D4
- 3) Cathode D4
- 4) Cathode D3
- 5) Anode D1, D3
- 6) Cathode D1



**CMLD6263C**  
**Marking Code: 63C**

**Lead Code:**

- 1) Anode D1
- 2) Anode D2
- 3) Cathode D3, D4
- 4) Anode D4
- 5) Anode D3
- 6) Cathode D1, D2



**CMLD6263S**  
**Marking Code: 63S**

**Lead Code:**

- 1) Cathode D2
- 2) Anode D3
- 3) Cathode D4
- 4) Cathode D3, Anode D4
- 5) Anode D1
- 6) Cathode D1, Anode D2