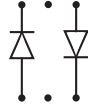


CMLD6001DO

SURFACE MOUNT  
PICOmini™  
DUAL, ISOLATED, OPPOSING  
LOW LEAKAGE SILICON  
SWITCHING DIODES

PICOmini™



SOT-563 CASE

**Central**™  
**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMLD6001DO type contains Two (2) Isolated Opposing Configuration, Silicon Switching Diodes, manufactured by the epitaxial planar process, epoxy molded in a PICOmini™ surface mount package. These devices are designed for switching applications requiring extremely low leakage.

**MARKING CODE: C60**

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

Continuous Reverse Voltage  
Peak Repetitive Reverse Voltage  
Continuous Forward Current  
Forward Surge Current,  $t_p=1 \mu\text{sec}$ .  
Forward Surge Current,  $t_p=1 \text{sec}$ .  
Power Dissipation  
Operating and Storage  
Junction Temperature  
Thermal Resistance

SYMBOL		UNITS
$V_R$	75	V
$V_{RRM}$	100	V
$I_F$	250	mA
$I_{FSM}$	4000	mA
$I_{FSM}$	1000	mA
$P_D$	250	mW
$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
$\theta_{JA}$	500	$^\circ\text{C/W}$

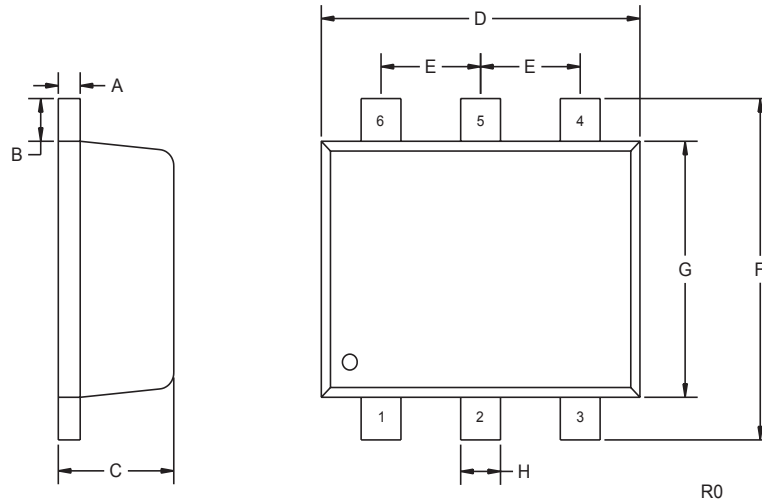
**ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	$V_R=75\text{V}$		500	pA
$BV_R$	$I_R=100\mu\text{A}$	100		V
$V_F$	$I_F=1.0\text{mA}$		0.85	V
$V_F$	$I_F=10\text{mA}$		0.95	V
$V_F$	$I_F=100\text{mA}$		1.1	V
$C_T$	$V_R=0, f=1 \text{MHz}$		2.0	pF
$t_{rr}$	$I_R=I_F=10\text{mA}, R_L=100\Omega \text{ Rec. to } 1.0\text{mA}$		3.0	$\mu\text{s}$

R0 (3-November 2003)

**SURFACE MOUNT  
PICOmini<sup>TM</sup>  
DUAL, ISOLATED, OPPOSING  
LOW LEAKAGE SILICON  
SWITCHING DIODES**

**SOT-563 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

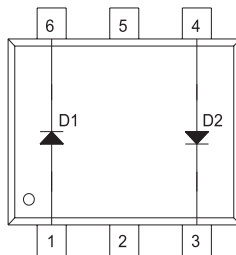
- 1) ANODE D1
- 2) NC
- 3) CATHODE D2
- 4) ANODE D2
- 5) NC
- 6) CATHODE D1

**MARKING CODE: C60**

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
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)

**Dual Opposing Configuration**



R0 (3-November 2003)