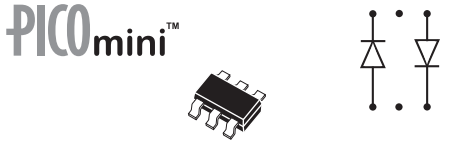
CMLD4448DO

SURFACE MOUNT
PICOmini™
DUAL, ISOLATED, OPPOSING
HIGH SPEED SILICON
SWITCHING DIODES



SOT-563 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMLD4448DO 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 high speed switching applications.

MARKING CODE: C40

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	120	V
Continuous Forward Current	I_F	250	mA
Peak Repetitive Forward Current	I_{FRM}	500	mA
Forward Surge Current, tp=1ms	I_{FSM}	4.0	A
Forward Surge Current, tp=1s	I_{FSM}	1.0	A
Power Dissipation	P_D	300	mW
Operating and Storage Junction Temperature	T_J,T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	417	°C/W

ELECTRICAL CHARACTERISTICS PER DIODE: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
BV_R	I_R=100μA	120	150		V
I_R	V_R=50V			300	nA
I_R	V_R=50V, T_A=125°C			100	μA
I_R	V_R=100V			500	nA
V_F	I_F=1.0mA	0.55	0.59	0.65	V
V_F	I_F=10mA	0.67	0.72	0.77	V
V_F	I_F=100mA	0.85	0.91	1.0	V
C_T	V_R=0, f=1 MHz			1.5	pF
t_{rr}	I_R=I_F=10mA, R_L=100Ω, Rec. to 1.0mA		2.0	4.0	ns

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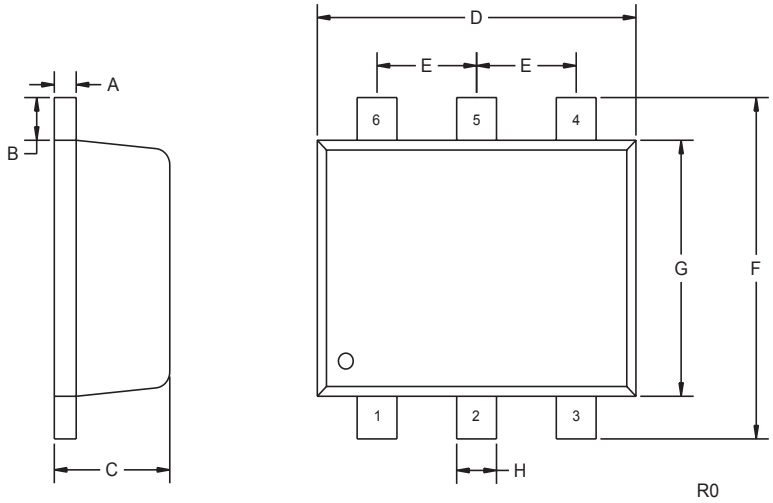
SOT-563 CASE - MECHANICAL OUTLINE



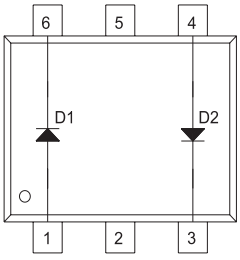
LEAD CODE:
1) ANODE D1
2) NC
3) CATHODE D2
4) ANODE D2
5) NC
6) CATHODE D1

MARKING CODE: C40

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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



R1 (2-December 2003)