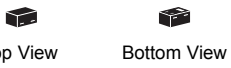
CEDM7001

SURFACE MOUNT
N-CHANNEL
ENHANCEMENT-MODE
SILICON MOSFET

TLP™ Tiny Leadless Package



Top View Bottom View

SOT-883L CASE

MARKING CODE: CEDM7001: H

Central™ Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CEDM7001 is an Enhancement-mode N-Channel Field Effect Transistor, manufactured by the N-Channel DMOS Process, designed for high speed pulsed amplifier and driver applications. This MOSFET offers Low $r_{DS(on)}$ and Low Theshold Voltage.

FEATURES:

- Power Dissipation 100mW
- Low Package Profile, 0.4mm
- Low $r_{DS(on)}$
- Low Threshold Voltage
- Logic Level Compatible
- Small, TLP™ 1x0.6mm, SOT-883L Leadless Surface Mount Package

APPLICATIONS:

- Load/Power Switches
- Power Supply Converter Circuits
- Battery Powered Portable Equipment

MAXIMUM RATINGS (T_A=25°C)

	SYMBOL		UNITS
Drain-Source Voltage	V_{DS}	20	V
Gate-Source Voltage	V_{GS}	10	V
Continuous Drain Current (Steady State)	I_D	100	mA
Continuous Drain Current	I_D	200	mA
Power Dissipation	P_D	100	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{GSSF}	V_{GS}=10V, V_{DS}=0V			1.0	μA
I_{GSSR}	V_{GS}=10V, V_{DS}=0V			1.0	μA
I_{DSS}	V_{DS}=20V, V_{GS}=0V			1.0	μA
BV_{DSS}	V_{GS}=0V, I_D=100μA	20			V
$V_{GS(th)}$	V_{DS}=V_{GS}, I_D=250μA	0.6		0.9	V
$r_{DS(ON)}$	V_{GS}=4.0V, I_D=10mA			3.0	Ω
$r_{DS(ON)}$	V_{GS}=2.5V, I_D=10mA			4.0	Ω
$r_{DS(ON)}$	V_{GS}=1.5V, I_D=1.0mA			15	Ω
Y_{fs}	V_{DS} =10V, I_D=100mA	100			mS
C_{rss}	V_{DS}=3.0V, V_{GS}=0, f=1.0MHz		4.0		pF
C_{iss}	V_{DS}=3.0V, V_{GS}=0, f=1.0MHz		9.0		pF
C_{oss}	V_{DS}=3.0V, V_{GS}=0, f=1.0MHz		9.5		pF
t_{on}	V_{DD}=3.0V, V_{GS}=2.5V, I_D=10mA		50		ns
t_{off}	V_{DD}=3.0V, V_{GS}=2.5V, I_D=10mA		75		ns

R3 (31-July 2007)

Central™
Semiconductor Corp.

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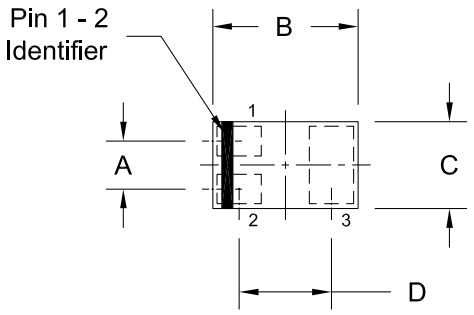
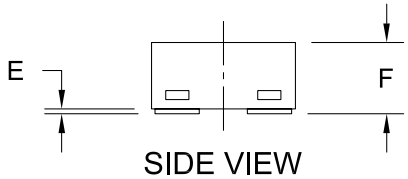
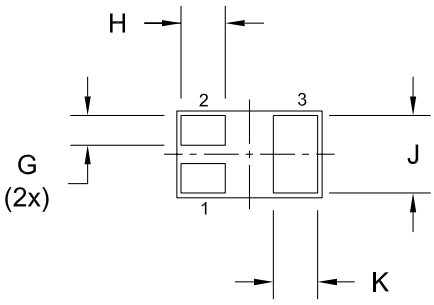
SOT-883L - MECHANICAL OUTLINE



TOP VIEW



SIDE VIEW



BOTTOM VIEW R2

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.014		0.35	
B	0.037	0.041	0.95	1.05
C	0.022	0.026	0.55	0.65
D	0.026		0.65	
E	0.000	0.002	0.00	0.05
F	0.012	0.016	0.30	0.40
G	0.005	0.007	0.13	0.18
H	0.008	0.012	0.20	0.30
J	0.018	0.022	0.45	0.55
K	0.008	0.012	0.20	0.30

SOT-883L (REV:R2)

LEAD CODE:
1) GATE
2) SOURCE
3) DRAIN

R3 (31-July 2007)