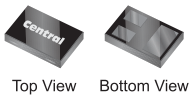
CEDM8001

SURFACE MOUNT
P-CHANNEL
ENHANCEMENT-MODE
SILICON MOSFET

TLP™ Tiny Leadless Package



Top View Bottom View

SOT-883L CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CEDM8001 is an P-Channel Enhancement-mode Field Effect Transistor, manufactured by the P-Channel DMOS Process, designed for high speed pulsed amplifier and driver applications. This MOSFET offers Low $r_{DS(on)}$ and Low Theshold Voltage.

MARKING CODE: F

FEATURES:

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

APPLICATIONS:

- Load/Power Switches
- DC - DC Converters
- 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}, I_{GSSR}	V_{GS}=10V, V_{DS}=0			1.0	μA
BV_{DSS}	V_{GS}=0, I_D=100μA	20			V
$V_{GS(th)}$	V_{DS}=V_{GS}, I_D=250μA	0.6		1.1	V
$r_{DS(ON)}$	V_{GS}=4.0V, I_D=10mA			8.0	Ω
$r_{DS(ON)}$	V_{GS}=2.5V, I_D=10mA			12	Ω
$r_{DS(ON)}$	V_{GS}=1.5V, I_D=1.0mA			45	Ω
$Q_{g(tot)}$	V_{DS}=10V, V_{GS}=4.5V, I_D=100mA		0.658		nC
Q_{gs}	V_{DS}=10V, V_{GS}=4.5V, I_D=100mA		0.158		nC
Q_{gd}	V_{DS}=10V, V_{GS}=4.5V, I_D=100mA		0.181		nC
g_{fs}	V_{DS}=10V, I_D=100mA	100			mS
C_{rss}	V_{DS}=3.0V, V_{GS}=0, f=1.0MHz		15		pF
C_{iss}	V_{DS}=3.0V, V_{GS}=0, f=1.0MHz		45		pF
C_{oss}	V_{DS}=3.0V, V_{GS}=0, f=1.0MHz		15		pF
t_{on}	V_{DD}=3.0V, V_{GS}=2.5V, I_D=10mA		35		ns
t_{off}	V_{DD}=3.0V, V_{GS}=2.5V, I_D=10mA		80		ns

R6 (2-August 2011)

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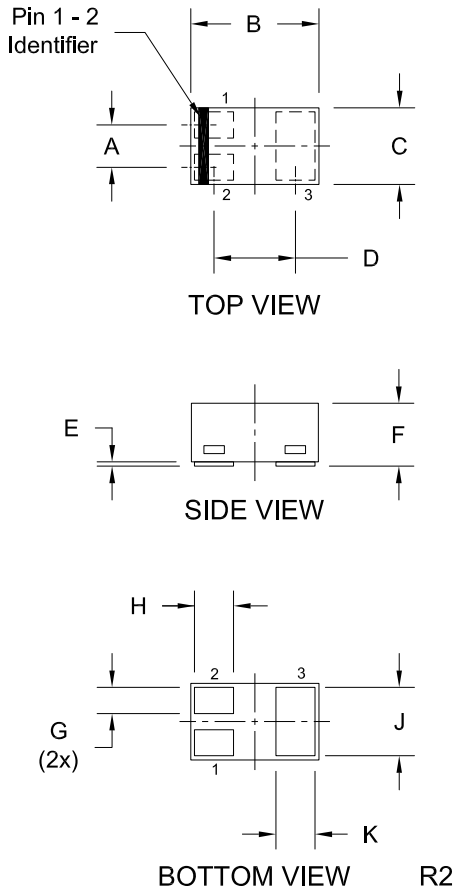
SOT-883L CASE - MECHANICAL OUTLINE



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

MARKING CODE: F