

CEDM8004

SURFACE MOUNT
P-CHANNEL
ENHANCEMENT-MODE
SILICON MOSFET

TLPTM
Tiny Leadless Package



Top View Bottom View

SOT-883L CASE

• Devices are **Halogen Free** by design

APPLICATIONS:

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

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

Drain-Source Voltage	V_{DS}	30	V
Gate-Source Voltage	V_{GS}	8.0	V
Continuous Drain Current	I_D	450	mA
Power Dissipation	P_D	100	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{GSSF}, I_{GSSR}	$V_{GS}=8.0\text{V}, V_{DS}=0$		3.0	μA
I_{DSS}	$V_{DS}=30\text{V}, V_{GS}=0$		1.0	μA
BV_{DSS}	$V_{GS}=0, I_D=100\mu\text{A}$	30		V
$V_{GS(\text{th})}$	$V_{DS}=V_{GS}, I_D=250\mu\text{A}$	0.5	1.0	V
V_{SD}	$V_{GS}=0, I_S=100\text{mA}$		1.1	V
$r_{DS(\text{ON})}$	$V_{GS}=4.5\text{V}, I_D=430\text{mA}$		1.1	Ω
$r_{DS(\text{ON})}$	$V_{GS}=2.5\text{V}, I_D=200\text{mA}$		2.0	Ω
$r_{DS(\text{ON})}$	$V_{GS}=1.8\text{V}, I_D=100\text{mA}$		3.3	Ω
g_{FS}	$V_{DS}=10\text{V}, I_D=100\text{mA}$	200		mS
C_{rss}	$V_{DS}=25\text{V}, V_{GS}=0, f=1.0\text{MHz}$		10	pF
C_{iss}	$V_{DS}=25\text{V}, V_{GS}=0, f=1.0\text{MHz}$		55	pF
C_{oss}	$V_{DS}=25\text{V}, V_{GS}=0, f=1.0\text{MHz}$		15	pF



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CEDM8004 is an Enhancement-mode P-Channel Field Effect Transistor, manufactured by the P-Channel DMOS Process, designed for high speed pulsed amplifier and driver applications. This MOSFET offers Low $r_{DS(\text{on})}$ and Low Threshold Voltage.

MARKING CODE: V

FEATURES:

- ESD Protection up to 2kV
- Low $r_{DS(\text{on})}$
- Low Threshold Voltage
- Logic Level Compatible
- Small, TLP™ 1x0.6mm, SOT-883L, Ultra Low Profile 0.4mm Leadless Surface Mount Package
- Complimentary N-Channel MOSFET CEDM7004

UNITS

V

V

mA

mW

$^\circ\text{C}$

UNITS

μA

μA

V

V

V

Ω

Ω

Ω

mS

pF

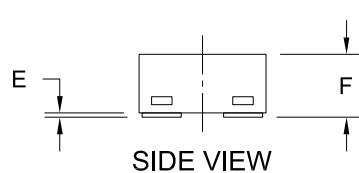
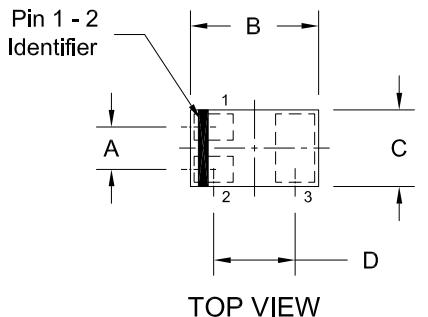
pF

pF

R1 (28-July 2010)

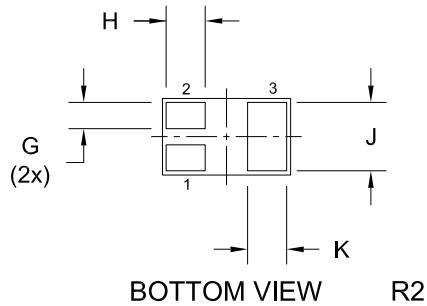
**SURFACE MOUNT
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SOT-883L CASE - MECHANICAL OUTLINE

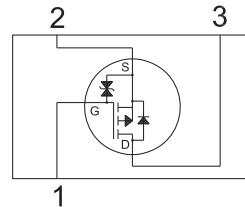


SYMBOL	DIMENSIONS			
	INCHES	MILLIMETERS	MIN	MAX
A	0.014	0.35		
B	0.037	0.95	0.041	1.05
C	0.022	0.55	0.026	0.65
D	0.026	0.65		
E	0.000	0.00	0.002	0.05
F	0.012	0.30	0.016	0.40
G	0.005	0.13	0.007	0.18
H	0.008	0.20	0.012	0.30
J	0.018	0.45	0.022	0.55
K	0.008	0.20	0.012	0.30

SOT-883L (REV:R2)



**PIN CONFIGURATION
(Bottom View)**



LEAD CODE:
 1) Gate
 2) Source
 3) Drain

MARKING CODE: V

R1 (28-July 2010)