

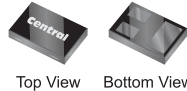
CEDM7004

**SURFACE MOUNT
N-CHANNEL
ENHANCEMENT-MODE
SILICON MOSFET**



www.centrasemi.com

TLP Tiny Leadless Package



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°C)

Drain-Source Voltage
Gate-Source Voltage
Continuous Drain Current (T_L=25°C)
Peak Drain Current, tp≤10μs (T_L=25°C)
Continuous Source Current (T_L=25°C)
Peak Source Current, tp≤10μs (T_L=25°C)
Power Dissipation
Operating and Storage Junction Temperature

SYMBOL

SYMBOL		UNITS
V _{DS}	30	V
V _{GS}	8.0	V
I _D	1.78	A
I _{DM}	3.56	A
I _S	1.78	A
I _{SM}	3.56	A
P _D	100	mW
T _J , T _{stg}	-65 to +150	°C

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

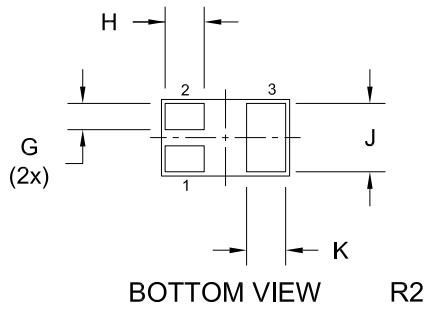
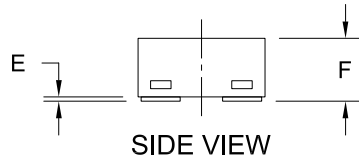
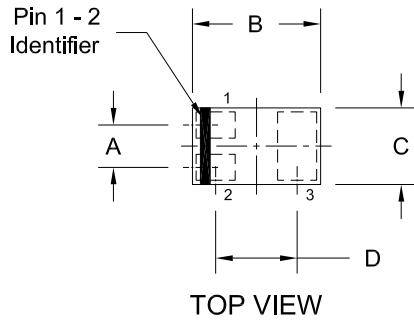
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{GSSF} , I _{GSSR}	V _{GS} =8.0V, V _{DS} =0			3.0	μA
I _{DSS}	V _{DS} =30V, V _{GS} =0			1.0	μA
BV _{DSS}	V _{GS} =0, I _D =10μA	30			V
V _{GS(th)}	V _{DS} =V _{GS} , I _D =250μA	0.5		1.0	V
V _{SD}	V _{GS} =0, I _S =400mA	0.5		1.1	V
r _{DS(ON)}	V _{GS} =4.5V, I _D =200mA		280	460	mΩ
r _{DS(ON)}	V _{GS} =2.5V, I _D =100mA		390	560	mΩ
r _{DS(ON)}	V _{GS} =1.8V, I _D =75mA		550	730	mΩ
Q _{g(tot)}	V _{DS} =15V, V _{GS} =4.5V, I _D =1.0A		0.792		nC
Q _{gs}	V _{DS} =15V, V _{GS} =4.5V, I _D =1.0A		0.15		nC
Q _{gd}	V _{DS} =15V, V _{GS} =4.5V, I _D =1.0A		0.23		nC
g _{FS}	V _{DS} =10V, I _D =100mA	200			mS
C _{rSS}	V _{DS} =25V, V _{GS} =0, f=1.0MHz		5.0		pF
C _{iSS}	V _{DS} =25V, V _{GS} =0, f=1.0MHz		43		pF
C _{oss}	V _{DS} =25V, V _{GS} =0, f=1.0MHz		8.0		pF
t _{on}	V _{DS} =5.0V, V _{GS} =4.0V, I _D =75mA, R _G =10Ω		20		ns
t _{off}	V _{DS} =5.0V, V _{GS} =4.0V, I _D =75mA, R _G =10Ω		75		ns

R4 (2-August 2011)

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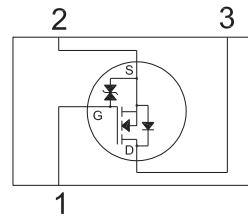
SOT-883L CASE - MECHANICAL OUTLINE



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	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)

PIN CONFIGURATION
(Bottom View)



LEAD CODE:

- 1) Gate
- 2) Source
- 3) Drain

MARKING CODE: S

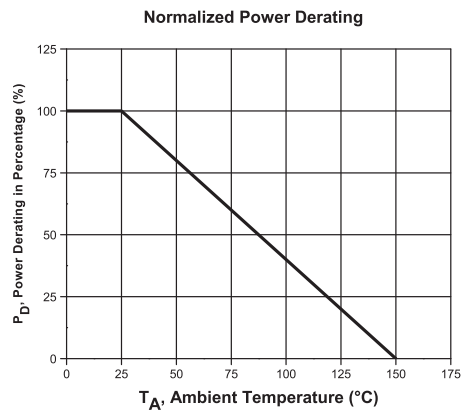
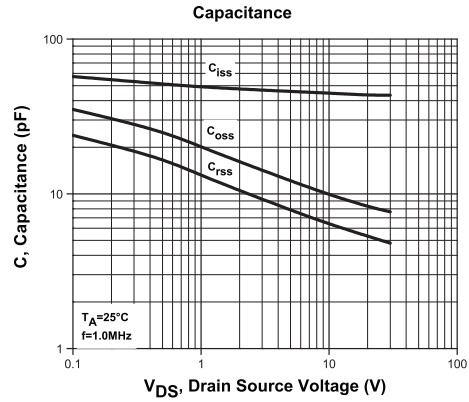
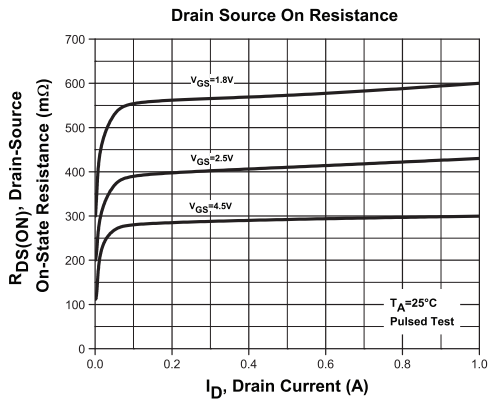
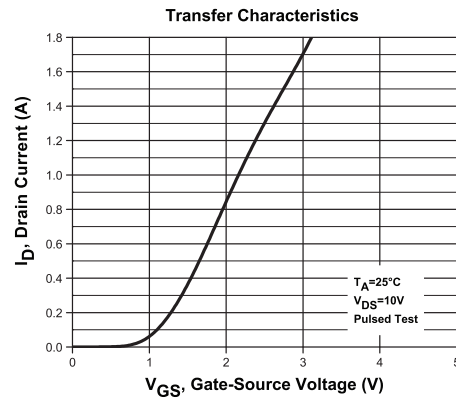
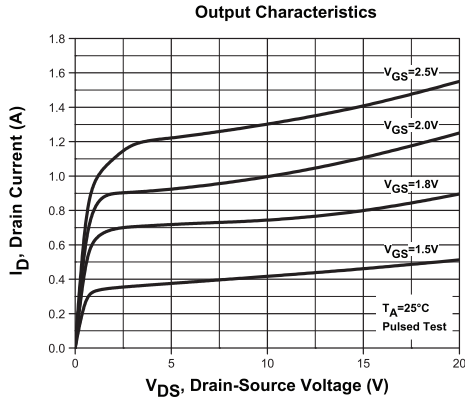
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TYPICAL ELECTRICAL CHARACTERISTICS



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