CXDM4060P

SURFACE MOUNT SILICON P-CHANNEL ENHANCEMENT-MODE MOSFET



www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CXDM4060P is a high current silicon P-Channel enhancement-mode MOSFET, designed for high speed pulsed amplifier and driver applications. This MOSFET features high current, low rDS(ON), low threshold voltage, and low gate charge.

MARKING: FULL PART NUMBER



SOT-89 CASE

APPLICATIONS:

- Load/Power switches
- Power supply converter circuits
- Battery powered portable equipment

FEATURES:

- Low $r_{DS(ON)}$ (48m Ω TYP @ V_{GS} =10V)
- High current (I_D=6.0A)
- · Logic level compatibility

MAXIMUM RATINGS: (T _A =25°C)	SYMBOL		UNITS
Drain-Source Voltage	V_{DS}	40	V
Gate-Source Voltage	V_{GS}	25	V
Continuous Drain Current (Steady State)	I_{D}	6.0	Α
Maximum Pulsed Drain Current, tp=10µs	I_{DM}	20	Α
Power Dissipation	P_{D}	1.2	W
Operating and Storage Junction Temperature	T _J , T _{stg}	-55 to +150	°C
Thermal Resistance	ΘιΛ	104	°C/W

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

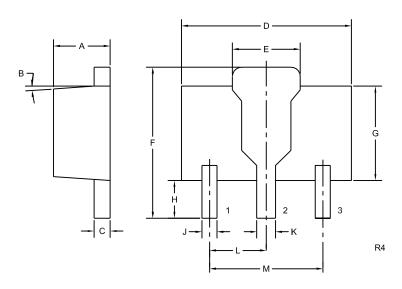
ELECTRICAL C	HARACTERISTICS: (TA=25°C ur	iless otherwise	e notea)		
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{GSSF} , I _{GSSR}	V_{GS} =25V, V_{DS} =0			100	nA
IDSS	V_{DS} =40V, V_{GS} =0			1.0	μΑ
BV _{DSS}	V _{GS} =0, I _D =250μA	40			V
V _{GS(th)}	$V_{GS}=V_{DS}$, $I_{D}=250\mu A$	1.0	2.0	3.0	V
V _{SD}	V _{GS} =0, I _S =2.0A			1.2	V
rDS(ON)	V _{GS} =10V, I _D =6.0A		48	65	$m\Omega$
r _{DS(ON)}	V_{GS} =4.5V, I_D =4.0A		80	95	$m\Omega$
C _{rss}	V_{DS} =25V, V_{GS} =0, f=1.0MHz		61		pF
C _{iss}	V_{DS} =25V, V_{GS} =0, f=1.0MHz		750		pF
C _{oss}	V_{DS} =25V, V_{GS} =0, f=1.0MHz		56		pF
$Q_{g(tot)}$	V_{DS} =32V, V_{GS} =4.5V, I_{D} =6.0A		6.5		nC
Qgs	V_{DS} =32V, V_{GS} =4.5V, I_{D} =6.0A		3.2		nC
Q_{gd}	V_{DS} =32V, V_{GS} =4.5V, I_{D} =6.0A		2.7		nC
ton	$ V_{DS}$ =20V, V_{GS} =10V, I_{D} =1.0A $ $		18		ns
^t off	R_G =3.0Ω, R_L =20Ω		64		ns

CXDM4060P

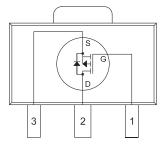
SURFACE MOUNT SILICON P-CHANNEL ENHANCEMENT-MODE MOSFET



SOT-89 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



(Top View) Tab is common to pin 2

DIMENSIONS						
	INCHES		MILLIMETERS			
SYMBOL	MIN	MAX	MIN	MAX		
Α	0.055	0.067	1.40	1.70		
В	4°		4°			
С	0.014	0.018	0.35	0.46		
D	0.173	0.185	4.40	4.70		
Е	0.064	0.074	1.62	1.87		
F	0.146	0.177	3.70	4.50		
G	0.090	0.106	2.29	2.70		
Н	0.028	0.051	0.70	1.30		
J	0.014	0.019	0.36	0.48		
K	0.017	0.023	0.44	0.58		
Ĺ	0.059		1.50			
М	0.118		3.00			

SOT-89 (REV: R4)

LEAD CODE:

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

MARKING: FULL PART NUMBER

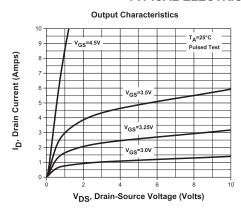
R1 (28-March 2013)

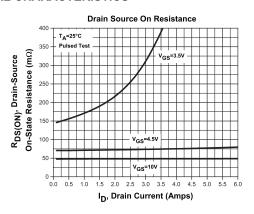
CXDM4060P

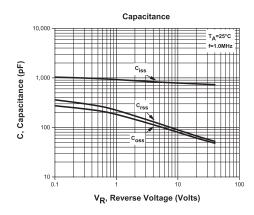
SURFACE MOUNT SILICON P-CHANNEL ENHANCEMENT-MODE MOSFET

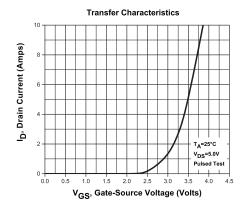


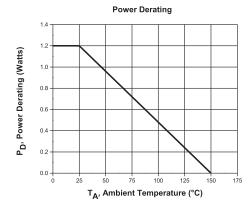
TYPICAL ELECTRICAL CHARACTERISTICS











R1 (28-March 2013)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- · Inventory bonding
- · Consolidated shipping options

- · Custom bar coding for shipments
- · Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free guick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- · Custom electrical curves
- · Environmental regulation compliance
- · Customer specific screening
- · Up-screening capabilities

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

- 1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA

Main Tel: (631) 435-1110 Main Fax: (631) 435-1824

Support Team Fax: (631) 435-3388

www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

Worldwide Distributors:

www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centralsemi.com/terms

www.centralsemi.com (001)