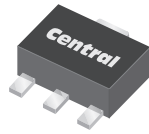


CXDM4060N
SURFACE MOUNT SILICON
N-CHANNEL
ENHANCEMENT-MODE
MOSFET



SOT-89 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CXDM4060N is a high current silicon N-Channel enhancement-mode MOSFET, designed for high speed pulsed amplifier and driver applications. This MOSFET offers high current, low $r_{DS(ON)}$, low threshold voltage, and low leakage current.

MARKING: FULL PART NUMBER

APPLICATIONS:

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

FEATURES:

- Low $r_{DS(ON)}$ (20m Ω TYP @ $V_{GS}=10V$)
- High current ($I_D=6.0A$)
- Logic level compatibility

MAXIMUM RATINGS: ($T_A=25^\circ C$)

| | |
|---|--|
| Drain-Source Voltage | |
| Gate-Source Voltage | |
| Continuous Drain Current (Steady State) | |
| Maximum Pulsed Drain Current, $t_p=10\mu s$ | |
| Power Dissipation | |
| Operating and Storage Junction Temperature | |
| Thermal Resistance | |

| SYMBOL | | UNITS |
|----------------|-------------|--------------|
| V_{DS} | 40 | V |
| V_{GS} | 20 | V |
| I_D | 6.0 | A |
| I_{DM} | 20 | A |
| P_D | 1.2 | W |
| T_J, T_{stg} | -55 to +150 | $^\circ C$ |
| θ_{JA} | 104 | $^\circ C/W$ |

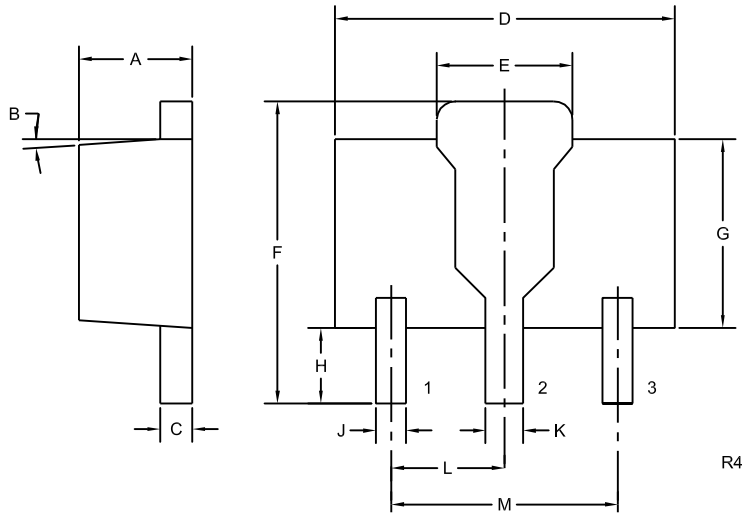
ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ C$ unless otherwise noted)

| SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|----------------------|------------------------------------|-----|-----|-----|------------|
| I_{GSSF}, I_{GSSR} | $V_{GS}=20V, V_{DS}=0$ | | | 100 | nA |
| I_{DSS} | $V_{DS}=32V, V_{GS}=0$ | | | 1.0 | μA |
| BV_{DSS} | $V_{GS}=0, I_D=250\mu A$ | 40 | | | V |
| $V_{GS(th)}$ | $V_{GS}=V_{DS}, I_D=250\mu A$ | 1.0 | 1.7 | 3.0 | V |
| V_{SD} | $V_{GS}=0, I_S=1.0A$ | | | 1.0 | V |
| $r_{DS(ON)}$ | $V_{GS}=10V, I_D=6.0A$ | | 20 | 31 | m Ω |
| $r_{DS(ON)}$ | $V_{GS}=4.5V, I_D=5.0A$ | | 30 | 45 | m Ω |
| $Q_g(tot)$ | $V_{DS}=20V, V_{GS}=10V, I_D=6.0A$ | | 12 | | nC |
| Q_{gs} | $V_{DS}=20V, V_{GS}=10V, I_D=6.0A$ | | 2.0 | | nC |
| Q_{gd} | $V_{DS}=20V, V_{GS}=10V, I_D=6.0A$ | | 2.2 | | nC |
| C_{rss} | $V_{DS}=20V, V_{GS}=0, f=1.0MHz$ | | 64 | | pF |
| C_{iss} | $V_{DS}=20V, V_{GS}=0, f=1.0MHz$ | | 730 | | pF |
| C_{oss} | $V_{DS}=20V, V_{GS}=0, f=1.0MHz$ | | 58 | | pF |
| t_{on} | $V_{DS}=20V, V_{GS}=10V, I_D=1.0A$ | | 27 | | ns |
| t_{off} | $R_G=3.0\Omega, R_L=3.3\Omega$ | | 33 | | ns |

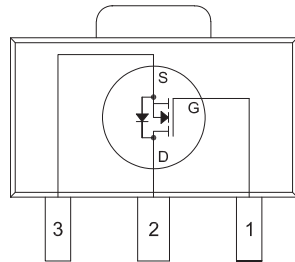
CXDM4060N
SURFACE MOUNT SILICON
N-CHANNEL
ENHANCEMENT-MODE
MOSFET



SOT-89 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



(Top View)
 Tab is common to pin 2

LEAD CODE:

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

MARKING: FULL PART NUMBER

| SYMBOL | INCHES | | MILLIMETERS | |
|--------|--------|-------|-------------|------|
| | MIN | MAX | MIN | MAX |
| A | 0.055 | 0.067 | 1.40 | 1.70 |
| B | 4° | | 4° | |
| C | 0.014 | 0.018 | 0.35 | 0.46 |
| D | 0.173 | 0.185 | 4.40 | 4.70 |
| E | 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 |
| H | 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 |
| L | 0.059 | | 1.50 | |
| M | 0.118 | | 3.00 | |

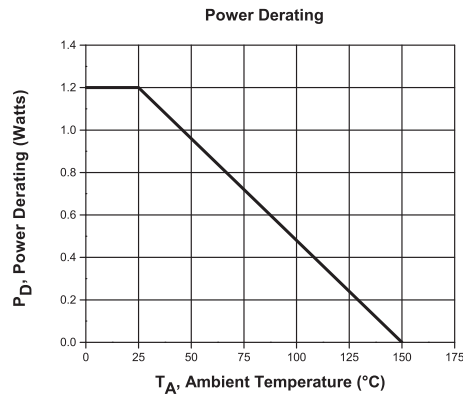
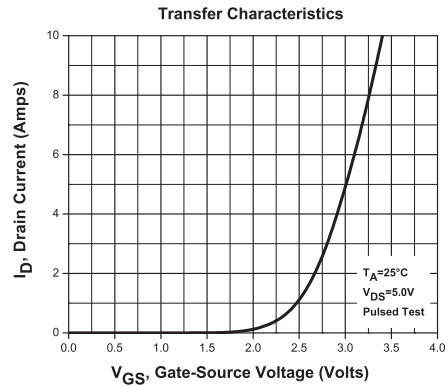
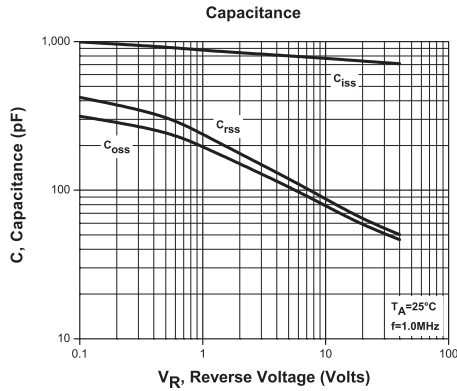
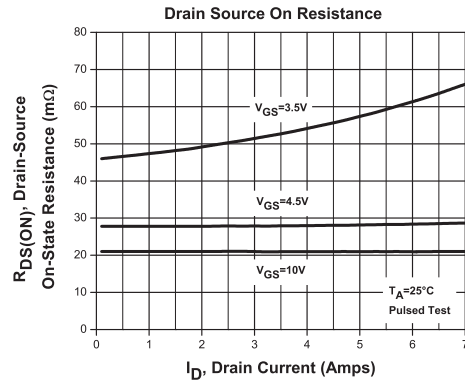
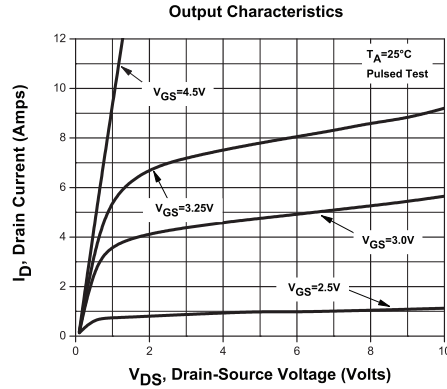
SOT-89 (REV: R4)

R2 (1-April 2013)

CXDM4060N
SURFACE MOUNT SILICON
N-CHANNEL
ENHANCEMENT-MODE
MOSFET



TYPICAL ELECTRICAL CHARACTERISTICS



R2 (1-April 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 quick 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.centalsemi.com

Worldwide Field Representatives:
www.centalsemi.com/wwreps

Worldwide Distributors:
www.centalsemi.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.centalsemi.com/terms

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [MOSFET](#) category:

Click to view products by [Central Semiconductor](#) manufacturer:

Other Similar products are found below :

[614233C](#) [648584F](#) [MCH3443-TL-E](#) [MCH6422-TL-E](#) [FDPF9N50NZ](#) [FW216A-TL-2W](#) [FW231A-TL-E](#) [APT5010JVR](#) [NTNS3A92PZT5G](#)
[IRF100S201](#) [JANTX2N5237](#) [2SK2464-TL-E](#) [2SK3818-DL-E](#) [FCA20N60_F109](#) [FDZ595PZ](#) [STD6600NT4G](#) [FSS804-TL-E](#) [2SJ277-DL-E](#)
[2SK1691-DL-E](#) [2SK2545\(Q,T\)](#) [D2294UK](#) [405094E](#) [423220D](#) [MCH6646-TL-E](#) [TPCC8103,L1Q\(CM](#) [367-8430-0972-503](#) [VN1206L](#)
[424134F](#) [026935X](#) [051075F](#) [SBVS138LT1G](#) [614234A](#) [715780A](#) [NTNS3166NZT5G](#) [751625C](#) [873612G](#) [IRF7380TRHR](#)
[IPS70R2K0CEAKMA1](#) [RJK60S3DPP-E0#T2](#) [RJK60S5DPK-M0#T0](#) [APT5010JVFR](#) [APT12031JFLL](#) [APT12040JVR](#) [DMN3404LQ-7](#)
[NTE6400](#) [JANTX2N6796U](#) [JANTX2N6784U](#) [JANTXV2N5416U4](#) [SQM110N05-06L-GE3](#) [SIHF35N60E-GE3](#)