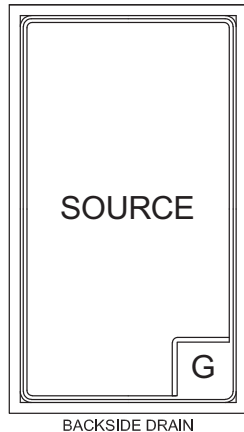


CP805-CXDM4060P

P-Channel MOSFET Die

Enhancement-Mode

The CP805-CXDM4060P medium power P-Channel MOSFET is optimized for power management and drive circuit applications where energy efficiency is a critical design element.



MECHANICAL SPECIFICATIONS:

Die Size	63.8 x 38.9 MILS
Die Thickness	5.5 MILS
Gate Bonding Pad Area	7.1 x 7.1 MILS
Source Bonding Pad Area	60.4 x 35.6 MILS
Top Side Metalization	Al-Cu – 40,000Å
Back Side Metalization	Ti/Ni/Ag – 1,000Å/3,000Å/10,000Å
Scribe Alley Width	1.97 MILS
Wafer Diameter	8 INCHES
Gross Die Per Wafer	17,312

MAXIMUM RATINGS: (T_A=25°C)

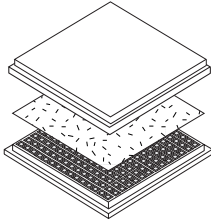
	SYMBOL		UNITS
Drain-Source Voltage	V _{DS}	40	V
Gate-Source Voltage	V _{GS}	20	V
Continuous Drain Current (Steady State)	I _D	6.4	A
Maximum Pulsed Drain Current, tp=10µs	I _{DM}	24.4	A
Operating and Storage Junction Temperature	T _J , T _{stg}	-55 to +150	°C

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{GSS}	V _{GS} =20V, V _{DS} =0			100	nA
I _{DSS}	V _{DS} =40V, V _{GS} =0			1.0	µA
BV _{DSS}	V _{GS} =0, I _D =250µA	40			V
V _{GS(th)}	V _{GS} =V _{DS} , I _D =250µA	1.0		3.0	V
V _{SD}	V _{GS} =0, I _S =1.0A			1.5	V
r _{DS(ON)}	V _{GS} =10V, I _D =1.0A			31	mΩ
r _{DS(ON)}	V _{GS} =4.5V, I _D =1.0A			42	mΩ
C _{iss}	V _{DS} =25V, V _{GS} =0, f=1.0MHz		1273		pF
C _{oss}	V _{DS} =25V, V _{GS} =0, f=1.0MHz		100.5		pF
C _{rss}	V _{DS} =25V, V _{GS} =0, f=1.0MHz		83.1		pF
Q _{g(tot)}	V _{DS} =32V, V _{GS} =4.5V, I _D =6.0A		16		nC
Q _{gs}	V _{DS} =32V, V _{GS} =4.5V, I _D =6.0A		2.7		nC
Q _{gd}	V _{DS} =32V, V _{GS} =4.5V, I _D =6.0A		6.3		nC
t _{on}	V _{DD} =20V, V _{GS} =10V, I _D =1.0A R _G =3.3Ω, R _L =20Ω		13.1		ns
t _r			5.2		ns
t _{off}			55.7		ns
t _f			10.7		ns

R1 (17-February 2021)

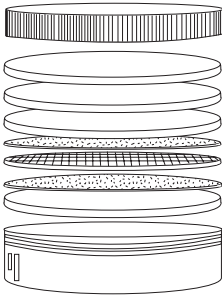
BARE DIE PACKING OPTIONS



BARE DIE IN TRAY (WAFFLE) PACK

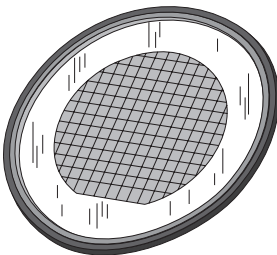
CT: Singulated die in tray (waffle) pack.
(example: CP211-PART NUMBER-CT)

CM: Singulated die in tray (waffle) pack 100% visually inspected as per MIL-STD-750, (method 2072 transistors, method 2073 diodes).
(example: CP211-PART NUMBER-CM)



UNSAWN WAFER

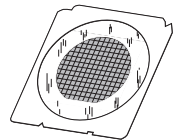
WN: Full wafer, unsawn, 100% tested with reject die inked.
(example: CP211-PART NUMBER-WN)



SAWN WAFER ON PLASTIC RING

WR: Full wafer, sawn and mounted on plastic ring,
100% tested with reject die inked.
(example: CP211-PART NUMBER-WR)

Please note: Sawn Wafer on Metal Frame (WS) is possible as a special order. Please contact your Central Sales Representative at 631-435-1110.



Visit the Central website for a complete listing of specifications:
www.centrasemi.com/bdspecs

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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

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- 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).

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