

CDM4-600LR | **CDM22011-600LRFP**
CDM7-600LR | **CDM7-700LR**

ULTRAMOS™

DKPAK



TO-220FP

FULL
PAK

N-Channel UltraMOS™ Power MOSFETs

Central Semiconductor's **CDM4-600LR** (4A, 600V in DPAK), **CDM7-600LR** (7A, 600V in DPAK), **CDM22011-600LRFP** (11A, 600V in TO-220FP) and **CDM7-700LR** (7A, 700V in DPAK), are N-Channel MOSFETs designed for high voltage, fast switching applications such as Power Factor Correction (PFC), Solid State Lighting (SSL), and power inverters. These MOSFETs combine high voltage capability with ultra low $r_{DS(ON)}$, low threshold voltage, and low gate charge for optimal efficiency.

Features:

- High voltage capability
- Low gate charge
- Ultra low $r_{DS(ON)}$

Applications:

- Power Factor Correction (PFC)
- Solid State Lighting (SSL)
- Alternative energy inverters

Benefits:

- Energy efficiency
- High power density
- Industry standard packages

Also available:

**800V Low $r_{DS(ON)}$
N-Channel MOSFETs**

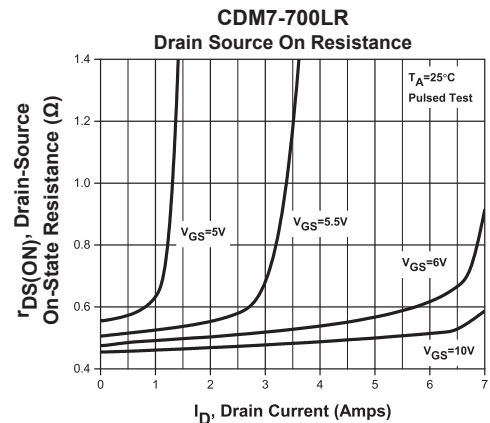
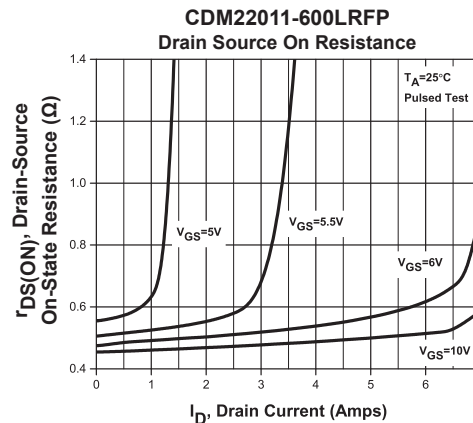
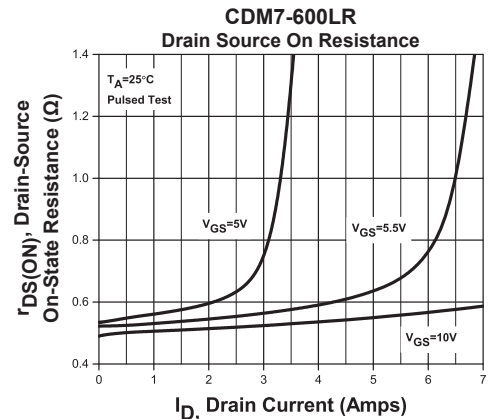
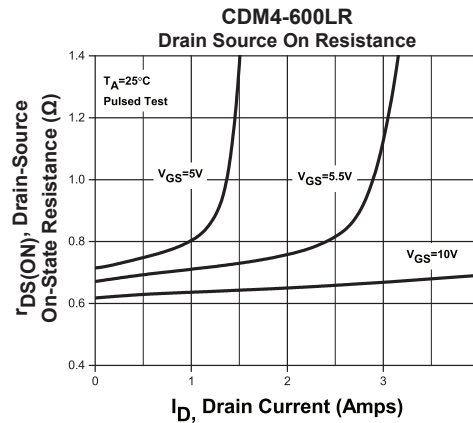
CDM2206-800LR (6A, 800V in TO-220) **CDM22012-800LRFP** (12A, 800V in TO220FP)

TO-220

FULL
PAK
TO-220FP

www.centrasemi.com/UltraMOS

Typical Electrical Characteristics



Type No.	Maximum Ratings ($T_A = 25^\circ\text{C}$)				Electrical Characteristics: ($T_A = 25^\circ\text{C}$)									Case Type	
	I_D	P_D	T_J, T_{stg}	θ_{JA}	BV_{DSS}	$V_{GS(th)}$		$r_{DS(ON)}$		$@ V_{GS}$	$@ I_D$	Q_{gs}	C_{iss}		C_{rss}
	(A)	(W)	($^\circ\text{C}$)	($^\circ\text{C}/\text{W}$)	(V)	MIN	MAX	(Ω)	(Ω)	(V)	(A)	(nC)	(pF)		(pF)
	MAX	MAX	MAX	MAX	MIN			TYP	MAX			TYP	TYP	TYP	
CDM4-600LR	4.0	38	-55 to +150	110	600	2.0	4.0	0.65	0.95	10	2.0	*2.04	328	1.31	DPAK
CDM7-600LR	7.0	60	-55 to +150	110	600	2.0	4.0	0.53	0.58	10	3.5	*2.62	440	1.94	DPAK
CDM22011-600LRFP	11	25	-55 to +150	120	600	2.0	4.0	0.30	0.36	10	5.5	*4.45	763	2.76	TO-220FP
CDM7-700LR	7.0	36	-55 to +150	62	700	2.0	4.0	0.48	0.60	10	3.5	*2.5	561	2.45	DPAK

* Note: Pulse Width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$

Services:

- Bonded inventory
- Custom electrical screening
- Custom electrical characteristic curves
- SPICE models
- Custom packaging
- Package base options
- Custom device development / Multi Discrete Modules (MDM™)

Weblink/Samples:



For more information
or to request
samples visit:



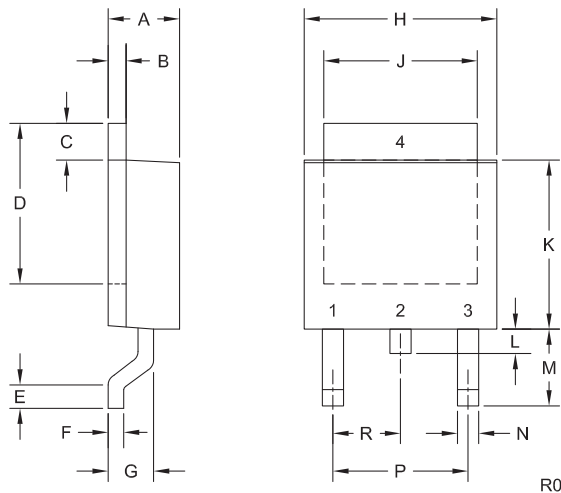
www.centrasemi.com/info/UltraMOS

CDM4-600LR
CDM7-600LR

CDM22011-600LRFP
CDM7-700LR

N-Channel
UltraMOS™
Power MOSFETs

Mechanical Drawing - DPAK



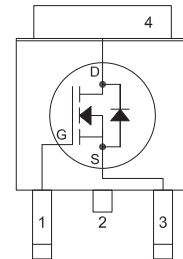
SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.083	0.108	2.10	2.75
B	0.016	0.032	0.40	0.81
C	0.035	0.063	0.89	1.60
D	0.203	0.228	5.15	5.79
E	0.020	-	0.51	-
F	0.018	0.024	0.45	0.60
G	0.051	0.071	1.30	1.80
H	0.248	0.268	6.30	6.81
J	0.197	0.217	5.00	5.50
K	0.209	0.245	5.30	6.22
L	0.025	0.040	0.64	1.02
M	0.090	0.115	2.30	2.91
N	0.012	0.045	0.30	1.14
P	0.180		4.60	
R	0.090		2.30	

DPAK (REV: R0)

Part Marking: Full Part Number

Pinout

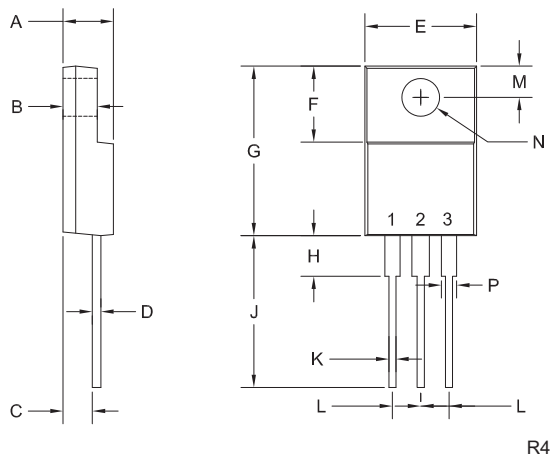
CDM4-600LR
CDM7-600LR
CDM7-700LR



LEAD CODE:

- 1) Gate
 - 2) Drain
 - 3) Source
 - 4) Drain
- Pin 2 is Common to Tab (4)

Mechanical Drawing - TO-220FP



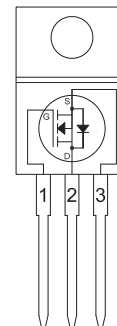
SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.165	0.202	4.20	5.12
B	0.090	0.130	2.30	3.30
C	0.098	0.122	2.50	3.10
D	-	0.031	-	0.80
E	0.382	0.418	9.70	10.63
F	0.238	0.276	6.06	7.00
G	0.583	0.640	14.80	16.25
H	-	0.161	-	4.10
J	0.506	0.543	12.85	13.80
K	0.020	0.031	0.50	0.79
L	0.100		2.54	
M	0.120	0.140	3.05	3.55
N (DIA)	0.116	0.134	2.95	3.40
P	0.039	0.058	1.00	1.47

TO-220FP (REV: R4)

Part Marking: Full Part Number

Pinout

CDM22011-600LRFP



LEAD CODE:

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

Packaging Base / Ordering Information

Reel Size	Quantity	Central Item No.
13"	2,500	CDM4-600LR TR13
		CDM7-600LR TR13
		CDM7-700LR TR13

Sleeve (Suffix SL)	Quantity	Central Item No.
	50	CDM22011-600LRFP SL

Sample devices available upon request. To order samples visit: www.centrasemi.com/info/UltraMOS



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Discretes do Matter™

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Any Questions?
(631) 435-1110 or visit:
www.centrasemi.com/justask



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PB UltraMOS 6-700V R0 (6/16)