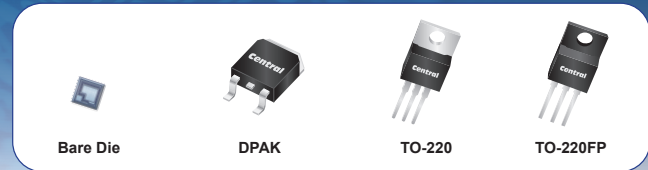


MOSFETs Ideal for Power Applications

600V - 4A, 7A, 11A | 800V - 6A, 12A



Central Semiconductor's latest **power MOSFET portfolio** features devices designed for high voltage, fast switching applications. These MOSFETs combine high voltage capability with ultra low $r_{DS(ON)}$, low threshold voltage, and low gate charge for optimal efficiency to satisfy the most demanding circuit designs. These products are available in surface mount and through-hole packages as well as bare die.

Features

- High voltage capability
- Low gate charge
- **Ultra low $r_{DS(ON)}$ as low as 0.3Ω TYP**

Applications

- Power factor correction (PFC)
- Alternative energy inverters
- Solid state lighting (SSL)

Benefits

- Energy efficiency
- Industry standard packages & footprints
- High power density

Central Item No.	Maximum Ratings ($T_A = 25^\circ\text{C}$)				Electrical Characteristics: ($T_A = 25^\circ\text{C}$)										Case Type
	I_D (A) MAX	P_D (W) MAX	T_J, T_{stg} ($^\circ\text{C}$) MAX	θ_{JA} ($^\circ\text{C/W}$) MAX	BV_{DSS} (V) MIN	$V_{GS(th)}$ (V) MIN MAX	$r_{DS(ON)}$ (Ω) TYP MAX	@ V_{GS} (V)	@ I_D (A)	$Q_g(tot)$ (nC) TYP	C_{iss} (pF) TYP	C_{rss} (pF) TYP			
CDM4-600LR	4.0	38	-55 to +150	110	600	2.0 4.0	0.70 0.88	10	2.5	16.63	3.5	3.0	DPAK		
CDM2206-800LR	6.0	110	-55 to +150	62.5	800	2.0 4.0	0.8 0.95	10	3.0	24.3*	474.7	3.3	TO-220		
CDM7-600LR	7.0	60	-55 to +150	110	600	2.0 4.0	0.53 0.58	10	3.5	16.0	427	1.9	DPAK		
CDM22011-600LRFP	11	25	-55 to +150	120	600	2.0 4.0	0.30 0.36	10	5.5	23.05	763	2.76	TO-220FP		
CDM22012-800LRFP	12	40	-55 to +150	62.5	800	2.0 4.0	0.37 0.45	10	6.0	52.4	1090	9.5	TO-220FP		

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

Also available as bare die:

Central Item No.	I_D (A)	BV_{DSS} (V)	Die Size (MILS)
CP401-CDM4-600LR	4.0	600	107.1 X 77.2
CP400-CDM7-600LR	7.0	600	110.2 X 101.6
CP399-CDM11-600L	11	600	149.6 X 107.1
CP393-CDM12-800L	12	800	196.5 X 146.1

Custom solutions also available:

- custom device development
- special wafer diffusions
- custom interconnect options
- packaging options
- specialized parametric testing
- up-screening to MIL standard equivalents or to customer specific criteria

SPICE Models and other technical resources:

Visit www.centalsemi.com to download SPICE models for these devices.

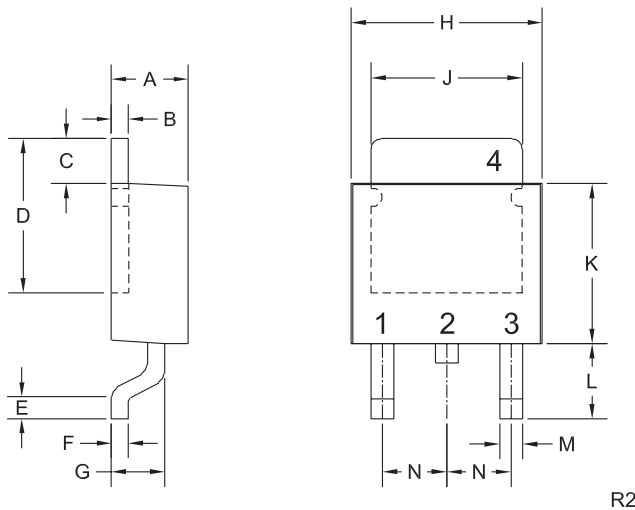
RoHS and REACH compliance declarations

Visit the Quality section of Central's website to access.

MOSFETs Ideal for Power Applications

600V - 4A, 7A 11A
800V - 6A, 12A

Mechanical Drawing - DPAK



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.083	0.108	2.10	2.75
B	0.016	0.024	0.40	0.60
C	0.063		1.60	
D	0.203	0.219	5.15	5.55
E	0.039		1.00	
F	0.020		0.50	
G	0.051	0.071	1.30	1.80
H	0.248	0.268	6.30	6.80
J	0.197	0.217	5.00	5.50
K	0.209	0.224	5.30	5.70
L	0.090	0.106	2.30	2.70
M	0.012	0.031	0.30	0.80
N	0.091		2.30	

LEAD CODE:

- 1) Anode
 - 2) Cathode
 - 3) Anode
 - 4) Cathode
- Pin 2 is Common to Tab (4)

MARKING:

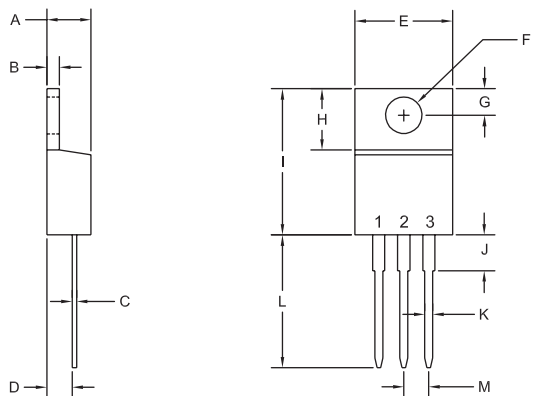
FULL PART NUMBER

DPAK RECTIFIER (REV: R2)

R2

Mechanical Drawing - TO-220

Mechanical Drawing - TO-220



R2

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.170	0.190	4.31	4.82
B	0.045	0.055	1.15	1.39
C	0.013	0.026	0.33	0.65
D	0.083	0.107	2.10	2.72
E	0.394	0.417	10.01	10.60
F (DIA)	0.140	0.157	3.55	4.00
G	0.100	0.118	2.54	3.00
H	0.230	0.270	5.85	6.85
I	0.560	0.625	14.23	15.87
J	-	0.250	-	6.35
K	0.025	0.038	0.64	0.96
L	0.500	0.579	12.70	14.70
M	0.090	0.110	2.29	2.79

TO-220 (REV: R2)

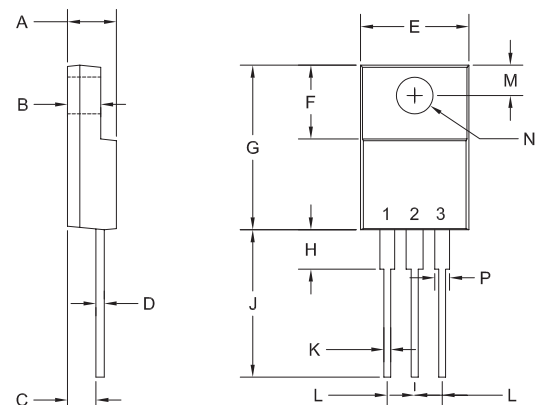
LEAD CODE:

- 1) Gate
 - 2) Drain
 - 3) Source
- (Tab is common to pin 2)

MARKING CODE: CDM06-800LR

Mechanical Drawing - TO-220FP

Mechanical Drawing - TO-220FP



R4

SYMBOL	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	0.096	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	0.056	1.00	1.47

TO-220FP (REV: R4)

LEAD CODE:

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

MARKING CODES:

CDM22011-600LRFP: CDM11-600LR
CDM22012-800LRFP: CDM12-800LR

For more information on Central's products and potential solutions:

Call us at: **1.631.435.1110**

Or view online: www.centrasemi.com/featured-products

