



Silicon Carbide N-Channel MOSFETs



TO-247 Case



The Central Semiconductor CDMS247xx-120 series are N-channel silicon carbide MOSFETs designed for high speed switching applications that require low conduction losses. It demonstrates consistent performance across the broad operating temperature range of -55°C to +175°C for both DC and dynamic characteristics, featuring low power loss under high temperature.

Features:

- Industry leading edge sub 20 mOhm on-resistance
- Low switching loss & high blocking voltage across the full temp range
- Packaged current rating as high as 80A & power rating over 25W

Applications:

- Sustainable energy
- Power distribution
- Transportation
- Motor drives

Benefits:

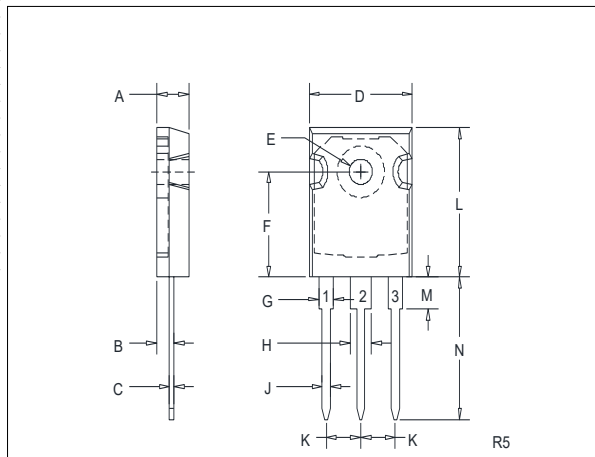
- High reliability across industrial applications
- Enhanced switching speeds versus silicon
- Insulated mounting tab
- Industry standard package

Central Item No.	Maximum Ratings (T _A =25 °C unless otherwise noted)					Electrical Characteristics: (T _A =25 °C unless otherwise noted)				Package	Central Die Item No.
	V _{DS} (V) MAX	V _{GS} (V) MAX	I _D (A) MAX	I _{DM} (A) MAX	T _J , T _{stg} (°C) MAX	r _{DS(ON)} (mΩ) TYP	V _{GS(th)} (V) TYP	T _R (nS) TYP	T _R (nS) TYP		
CDMS24720-120	1200	20	37	80	-55 to +175	20	2.6	60	18	TO-247	CPC23
CDMS24740-120	1200	20	26	40	-55 to +175	40	2.5	30	20	TO-247	CPC24
CDMS24760-120	1200	20	21	35	-55 to +175	60	2.6	18	16	TO-247	CPC20
CDMS24783-120	1200	20	18	20	-55 to +175	83	2.4	35	52	TO-247	CPC19

Mechanical Drawing: TO-247

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.184	0.211	4.68	5.36
B	0.087	0.110	2.20	2.80
C	0.019	0.028	0.48	0.70
D	0.606	0.638	15.38	16.20
E (DIA)	0.128	0.144	3.25	3.65
F	0.583	0.607	14.81	15.42
G	0.072	0.097	1.82	2.46
H	0.114	0.133	2.91	3.39
J	0.035	0.060	0.89	1.53
K	0.207	0.223	5.26	5.66
L	0.812	0.881	20.63	22.38
M	0.145	0.177	3.68	4.50
N	0.728	0.846	18.50	21.50

TO-247 (REV: R5)



For marking code, please see individual data sheets.

Package details information is available at www.centrasemi.com/package-details



For more information on Central's products and solutions:

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