NTD12N08, NTD12N08L

Product Preview

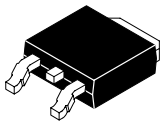
80 V Power MOSFET

ON Semiconductor utilizes its latest MOSFET technology process to manufacture 80 V power MOSFET devices to achieve the lowest possible on–resistance per silicon area. These 80 V devices are designed for Power Management solutions in 42 V Automotive system applications. Typical applications include integrated starter alternator, electronic power steering, electronic fuel injection, catalytic converter heaters and other high power applications made possible via an automotive 42 V bus. ON Semiconductor's latest technology offering continues to offer high avalanche energy capability and low reverse recovery losses.

ON Semiconductor

http://onsemi.com

12 AMPERES
12N08 Typ $R_{DS(on)}$ = 165 mΩ
12N08L Typ $R_{DS(on)}$ = 180 mΩ



DPAK
CASE 369A
STYLE 2

ELECTRICAL CHARACTERISTICS

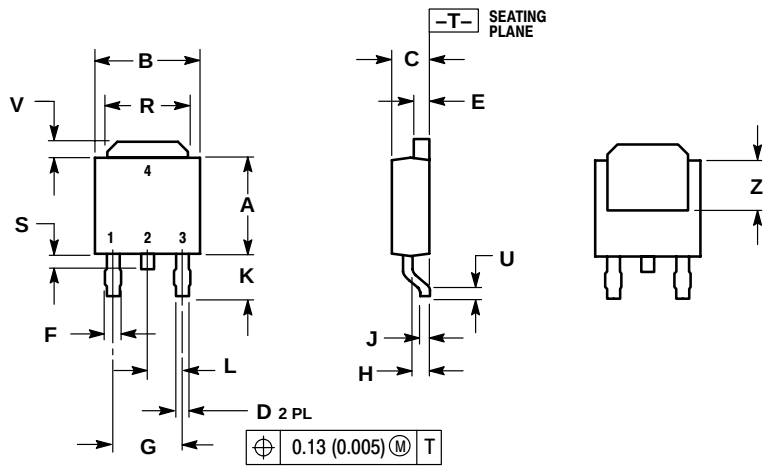
(T_J = 25°C unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
OFF CHARACTERISTICS					
Drain–to–Source Breakdown Voltage (V_{GS} = 0 Vdc, I_D = 250 μAdc)	$V_{(BR)DSS}$	80	–	–	Vdc
Zero Gate Voltage Drain Current (V_{DS} = 80 Vdc, V_{GS} = 0 Vdc)	I_{DSS}	–	–	1.0	μAdc
(V_{DS} = 80 Vdc, V_{GS} = 0 Vdc, T_J =150°C)		–	–	10	
Gate–Body Leakage Current (V_{GS} = ±20 Vdc, V_{DS} = 0 Vdc)	I_{GSS}	–	–	±100	nAdc
ON CHARACTERISTICS					
Gate Threshold Voltage (V_{DS} = V_{GS}, I_D = 250 μAdc)	$V_{GS(th)}$				Vdc
NTD12N08		2.0	3.0	4.0	
NTD12N08L		1.0	1.5	2.0	
Static Drain–to–Source On–Resistance (I_D = 6.0 Adc)	$R_{DS(on)}$				mΩ
NTD12N08, V_{GS}= 10 V		–	165	–	
NTD12N08L, V_{GS} = 5 V		–	180	–	

This document contains information on a product under development. ON Semiconductor reserves the right to change or discontinue this product without notice.

PACKAGE DIMENSIONS

DPAK
CASE 369A–13
ISSUE AA



NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.

	INCHES		MILLIMETERS	
DIM	MIN	MAX	MIN	MAX
A	0.235	0.250	5.97	6.35
B	0.250	0.265	6.35	6.73
C	0.086	0.094	2.19	2.38
D	0.027	0.035	0.69	0.88
E	0.033	0.040	0.84	1.01
F	0.037	0.047	0.94	1.19
G	0.180 BSC		4.58 BSC	
H	0.034	0.040	0.87	1.01
J	0.018	0.023	0.46	0.58
K	0.102	0.114	2.60	2.89
L	0.090 BSC		2.29 BSC	
R	0.175	0.215	4.45	5.46
S	0.020	0.050	0.51	1.27
U	0.020	---	0.51	---
V	0.030	0.050	0.77	1.27
Z	0.138	---	3.51	---

STYLE 2:
PIN 1. GATE
2. DRAIN
3. SOURCE
4. DRAIN

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Spanish Phone: 303–308–7143 (Mon–Fri 8:00am to 5:00pm MST)
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ASIA/PACIFIC: LDC for ON Semiconductor – Asia Support
Phone: 303–675–2121 (Tue–Fri 9:00am to 1:00pm, Hong Kong Time)
Toll Free from Hong Kong & Singapore:
001–800–4422–3781
Email: ONlit–asia@hibbertco.com

JAPAN: ON Semiconductor, Japan Customer Focus Center
4–32–1 Nishi–Gotanda, Shinagawa–ku, Tokyo, Japan 141–0031
Phone: 81–3–5740–2700
Email: r14525@onsemi.com

ON Semiconductor Website: http://onsemi.com

For additional information, please contact your local Sales Representative.