

# isc N-Channel MOSFET Transistor

# NDP708AE

## **FEATURES**

- ·Drain Current -I<sub>D</sub>= 60A@ T<sub>C</sub>=25 ℃
- ·Drain Source Voltage -V<sub>DSS</sub>= 80V(Min)
- ·Static Drain-Source On-Resistance
- $-R_{DS(on)} = 22m\Omega(Max)@V_{GS} = 10V$



## **DESCRIPTION**

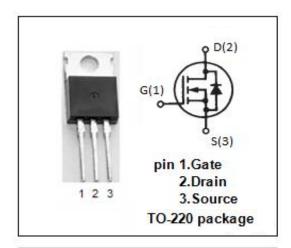
 Motor drive, DC-DC converter, power switch and solenoid drive.

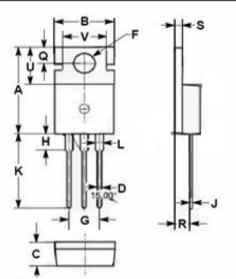
# ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	80	V
V <sub>GS</sub>	Gate-Source Voltage-Continuous	±20	V
I <sub>D</sub>	Drain Current-Continuous	60	А
І <sub>ОМ</sub>	Drain Current-Single Pluse	180	А
P <sub>D</sub>	Total Dissipation @T <sub>C</sub> =25℃	150	W
TJ	Max. Operating Junction Temperature	175	$^{\circ}$
T <sub>stg</sub>	Storage Temperature	-55~175	${\mathbb C}$

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	1.0	°C/W





DIM	mm		
	MIN	TYP.	MAX
Α	15.50	15.70	15.90
В	9.80	10.00	10.20
С	4.20	4.35	4.50
D	0.70	0.80	0.90
F	3.40	3.55	3.70
G	4.98	5.08	5.18
Н	2.68	2.79	2.90
J	0.44	0.52	0.60
K	12.80	13.10	13.40
L	1.20	1.32	1.45
Q	2.70	2.80	2.90
R	2.30	2.50	2.70
S	1.29	1.32	1.35
U	6.45	6.55	6.65
٧	8.66	8.76	8.86



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## **ELECTRICAL CHARACTERISTICS** (T<sub>C</sub>=25°C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 0.25mA	80		V
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 80V; V <sub>GS</sub> = 0		250	uA
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0		±100	nA
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> = 0.25mA	2.0	4.0	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 30A		22	m Ω
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 30A; V <sub>GS</sub> = 0		1.3	V

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