

# isc N-Channel MOSFET Transistor

# SSP3N80A

### **FEATURES**

- Drain Current -I<sub>D</sub>=4A@ T<sub>C</sub>=25 °C
- · Drain Source Voltage-
  - : V<sub>DSS</sub>= 800V(Min)
- Static Drain-Source On-Resistance
  - :  $R_{DS(on)}$  =4.0  $\Omega$  (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### **DESCRIPTION**

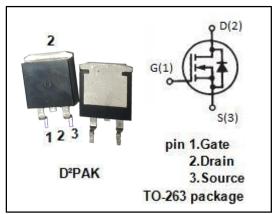
 motor drive, DC-DC converter, power switch and solenoid drive.

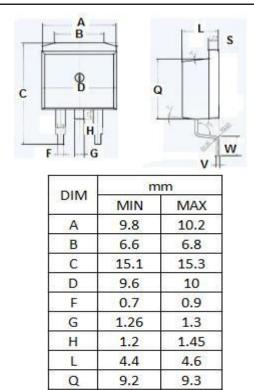
## ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	800	V
V <sub>GS</sub>	Gate-Source Voltage-Continuous	±30	V
I <sub>D</sub>	Drain Current-Continuous	4	Α
I <sub>DM</sub>	Drain Current-Single Pluse	16	Α
P <sub>D</sub>	Total Dissipation @Tc=25℃	120	W
TJ	Max. Operating Junction Temperature	150	$^{\circ}$
T <sub>stg</sub>	Storage Temperature	-55~150	$^{\circ}$

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth j-c	Thermal Resistance, Junction to Case	1.04	°C/W





1.25

0.4

2.6

1.35

0.6

2.8

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S

W



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### **ELECTRICAL CHARACTERISTICS**

T<sub>c</sub>=25℃ 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	800		V
$V_{\text{GS(th)}}$	Gate Threshold Voltage	V <sub>DS</sub> = 5V; I <sub>D</sub> =-0.25mA	2.0	3.5	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =0.85A		4.0	Ω
I <sub>GSS</sub>	Gate-Body Leakage Current	$V_{GS}$ = $\pm 30V$ ; $V_{DS}$ = 0		±0.1	uA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =800V; V <sub>GS</sub> = 0		25	uA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> =4A; V <sub>GS</sub> = 0		1.4	V



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