

# isc N-Channel MOSFET Transistor

# **80N08A**

#### • FEATURES

- Drain Current: I<sub>D</sub>= 80A@ T<sub>C</sub>=25°C
- · Drain Source Voltage
  - : V<sub>DSS</sub>= 80V(Min)
- Static Drain-Source On-Resistance
  - :  $R_{DS(on)} = 11m \Omega (Max)$
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



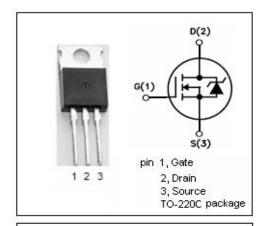
- Power switching applications
- Hard switched and high frequency circuits

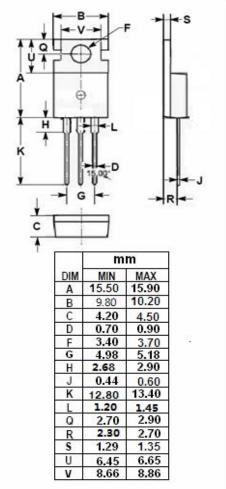
## • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>DSS</sub>	Drain-Source Voltage	80		
$V_{GS}$	Gate-Source Voltage-Continuous	±20	V	
I <sub>D</sub>	Drain Current-Continuous	80	Α	
I <sub>DM</sub>	Drain Current-Single Plused 380		Α	
P <sub>D</sub>	Total Dissipation @Tc=25°C 220		W	
Tj	Max. Operating Junction Temperature	c. Operating Junction Temperature 175		
T <sub>stg</sub>	torage Temperature -55~175		$^{\circ}$	
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#### • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	0.68	°C/W







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**A80N08** 

#### • ELECTRICAL CHARACTERISTICS

T<sub>C</sub>=25℃ unless otherwise specified

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SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> =250uA	80			V
$V_{\text{GS(th)}}$	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> =250uA	2.0		4.0	V
V <sub>SD</sub>	Diode Forward On-voltage	I <sub>S</sub> = 40A ;V <sub>GS</sub> = 0			1.2	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 40A			11	mΩ
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0			±100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 80V; V <sub>GS</sub> = 0			1	uA



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