

# isc N-Channel MOSFET Transistor

## FMH08N80E

#### • FEATURES

- Drain Current I<sub>D</sub>= 8A@ T<sub>C</sub>=25℃
- · Drain Source Voltage-
  - : V<sub>DSS</sub>= 800V(Min)
- Static Drain-Source On-Resistance
  - :  $R_{DS(on)} = 1.45 \Omega (Max)$
- · Fast Switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



#### APPLICATIONS

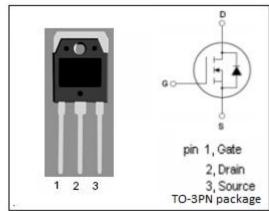
• generally applied in high efficiency switch mode power supplies.

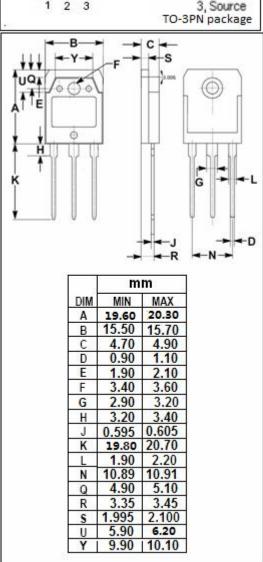
### • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

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 8		Α
I <sub>DM</sub>	Drain Current-Single Plused 32		Α
$P_D$	Total Dissipation @T <sub>C</sub> =25℃ 270		W
Tj	Max. Operating Junction Temperature	150	$^{\circ}$
T <sub>stg</sub>	Storage Temperature -55~150		$^{\circ}$

### • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	0.46	°C/W
R <sub>th j-a</sub>	R <sub>th j-a</sub> Thermal Resistance, Junction to Ambient		°C/W







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#### • 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> =250μA	800			V			
$V_{\text{GS(th)}}$	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> =250μA	3.0		5.0	V			
V <sub>SD</sub>	Diode Forward On-voltage	I <sub>S</sub> = 8A ;V <sub>GS</sub> = 0			1.4	V			
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 4A			1.45	Ω			
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±30V;V <sub>DS</sub> = 0			±100	nA			
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =800V; V <sub>GS</sub> = 0			10	μΑ			

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