



SHENZHEN HAOLIN ELECTRONICS TECHNOLOGY CO., LTD

TO-220F Plastic-Encapsulate Transistors

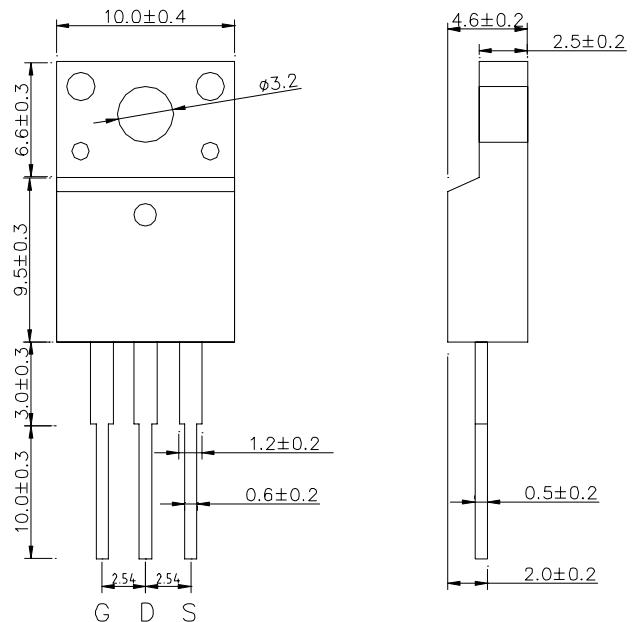
HF4N60 Feature

- N-Channel Enhancement Model MOSFET
- 600V/4.0A, $R_{DS(on)}=2.2\Omega(\text{MAX})$ @ $V_{GS}=10V$
- Super high dense cell design for extremely low $R_{DS(on)}$
- Reliable and Rugged
- Fast switching
- High thermal cycling performance
- Low thermal resistance

Application

- Switching regulators, Switching converters
- Switch mode power supplies(SMPS)

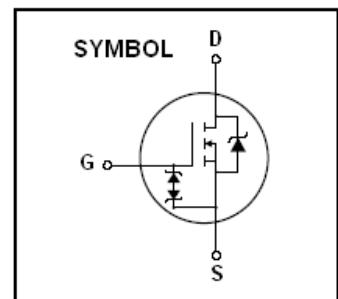
HF4N60 TO-220F



ABSOLUTE MAXIMUM RATINGS

(Ta=25°C Unless otherwise noted)

Parameter	Symbol	Limit	Units
Drain-source Voltage	V _{DS}	600	V
Gate-source Voltage	V _{GS}	30	V
Drain-Current Continuous, V _{GS} @10V	I _D @T _C =25°C	4	A
Drain-Current Continuous, V _{GS} @10V	I _D @T _C =150°C	2	A



ELECTRICAL CHARACTERISTICS (Ta=25°C Unless otherwise noted)

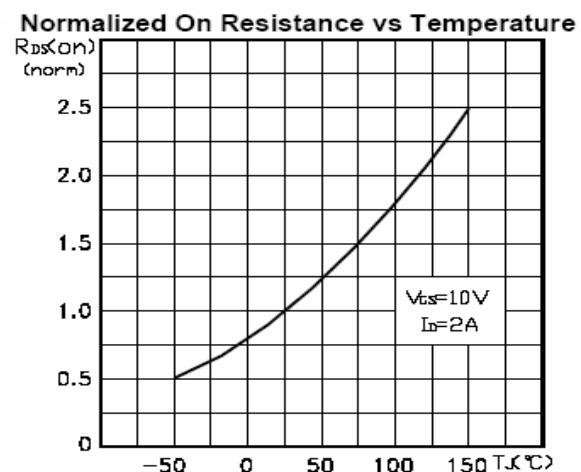
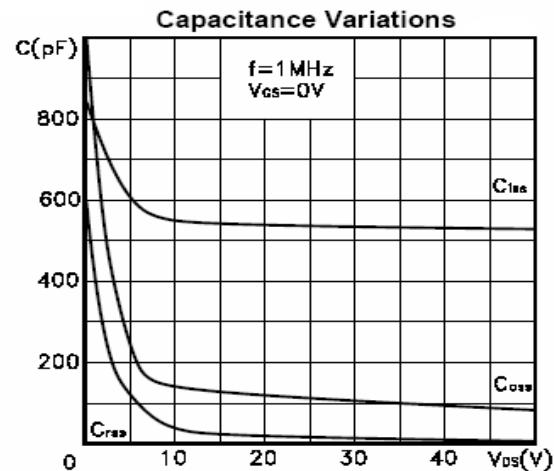
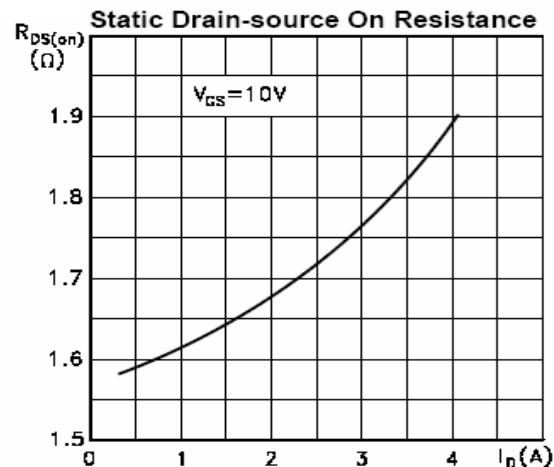
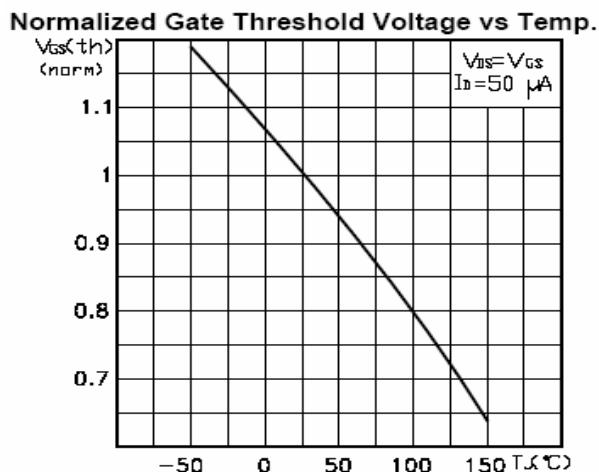
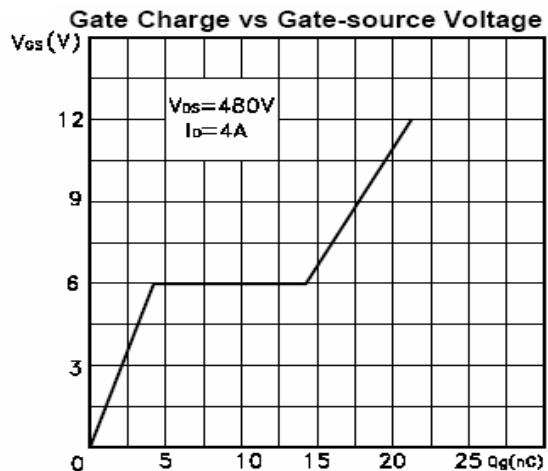
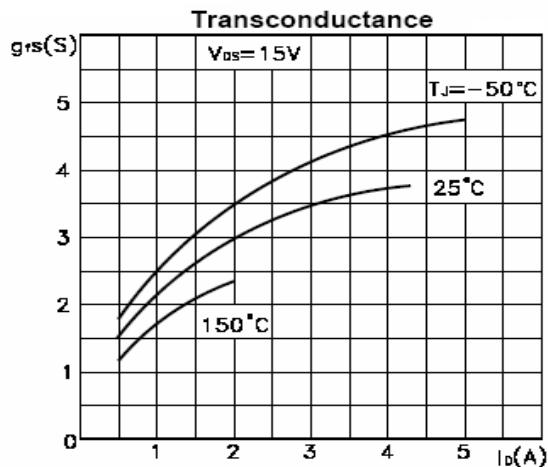
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
Off Characteristics						
Drain to Source Breakdown Voltage	BVDSS	600	—	—	V	V _{GS} =0V, I _D =250μA
Zero-Gate Voltage Drain Current	IDSS	—	—	100	μA	V _{DS} =600V, V _{GS} =0V
Gate Body Leakage Current	IGSS	—	—	100	nA	V _{GS} =30V, V _{DS} =0V
On Characteristics						
Gate Threshold Voltage	V _{GS(th)}	2	—	5	V	V _{GS(th)} =V _{DS} , I _D =250μA
Static Drain-source On-Resistance	R _{DS(ON)}	—	—	2.2	Ω	V _{GS} =10V, I _D =2.0A
Drain-Source Diode Characteristics and Maximum Ratings						
Drain-Source Diode Forward Voltage	V _{SD}	—	—	2.7	V	V _{GS} =0V, I _S =4.0A



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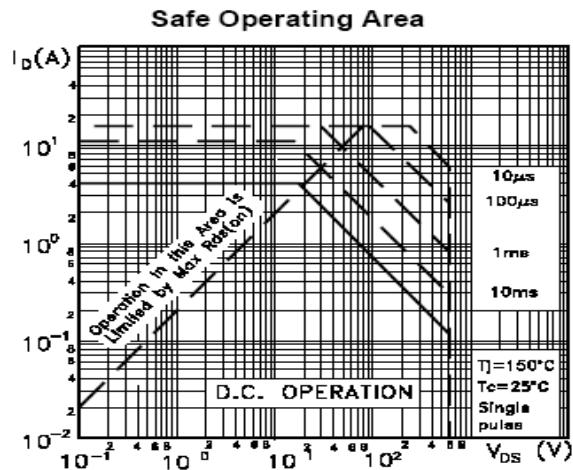




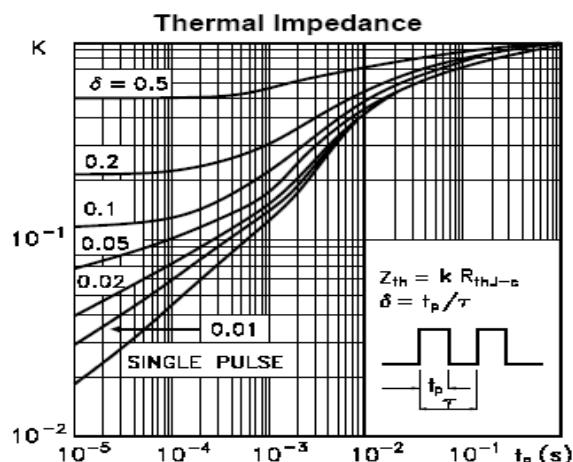
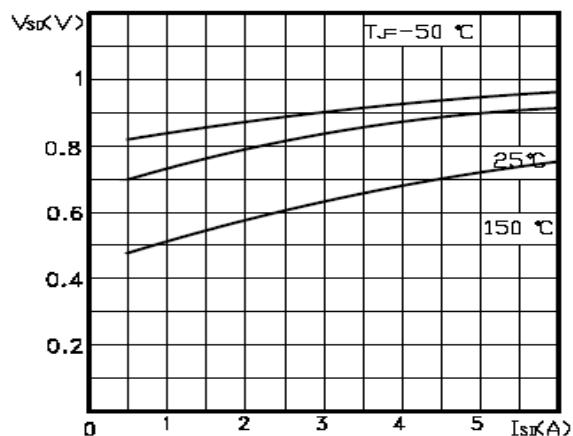
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Source-drain Diode Forward Characteristics



Normalized BVDSS vs Temperature

