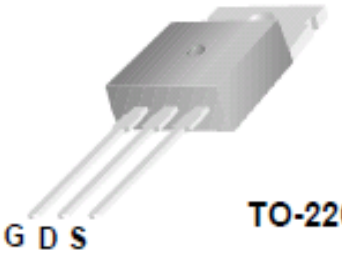
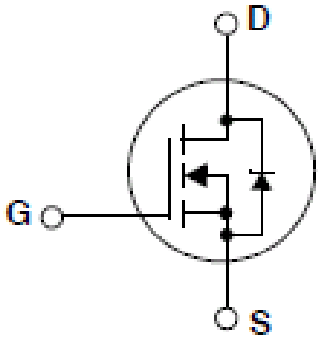
GFP 4N60

General description

- These N-channel enhancement mode power field effect Transistors are produced using planar stripe DMOS technology.
- This advanced technology has been especially tailored to minimize on-state resistance provide superior switching performance, and withstand high energy pulse in the avalanche and commutation mode. These devices are well suited for high efficiency switch mode power supply.





Absolute maximum ratings T=25℃ unless otherwise noted

Characteristics	Symbol	Value	Units
Drain-SourceVoltage	BV_{DSS}	600	V
Drain Current	I_D	4.4	A
Gate-Source Voltage	V_{GS}	±30	V
Single Pulsed Avalanche Energy	E_{AS}	260	mJ
Power Dissipation	P_D	106	W
Operating and Storage Temperature Range	T_{STG}	-55 --150	℃
Thermal Resistance ,Junction-to Case	$R\theta_{JC}$	1.18	℃/W
Drain-source Diode Forward Voltage	V_{SD}	1.4	V

Parameter	Symbol	Min	Typ.	Max	Units	Test conditions
Gate threshold voltage	V_{GS}(th)	2.0	-	4.0	V	V_{DS}=V_{GS} I_D=250μA
Gate-Body leakage Current	I_{GSS}	-	-	±100	nA	V_{GS}=±30V, V_{DS}=0V
Zero Gate voltage Drain current	I_{DSS}	-	-	10	μA	V_{DS}=600V, V_{GS}=0V
Static drain-source on-resistance	R_{DS}(on)	-	1.77	2.2	Ω	V_{GS}=10V , I_D=2.2A
Forward transfer conductance	G_{fs}	-	4	-	S	V_{DS}=50V , I_D=2.2A
Input capacitance	C_{iss}	-	520	670	pF	V_{GS}=0V,V_{DS}=25V, F=1.0MHZ
Output capacitance	C_{oss}	-	70	90		
Reverse transfer capacitance	C_{rss}	-	8	11		
Turn-on delay time	td (on)	-	13	35	ns	V_{DD}=300V,I_D=4.4A, R_G=25Ω
Turn-on rise time	t_r	-	45	100		
Turn-off delay time	td (off)	-	25	60		
Turn-off fall time	t_f	-	35	80		
Total Gate charge	Q_g	-	15	20	nC	V_{DS}=480V,V_{GS}=10V, I_D=4.4A,
Gate-source charge	Q_{gs}	-	3.4	-		
Gate-drain charge	Q_{gd}	-	7.1	-		