GFP 50N06

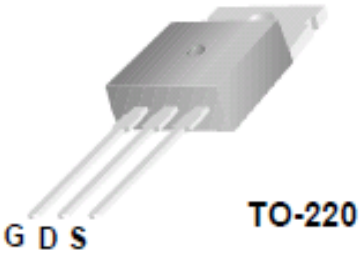
FEATURES (参数)

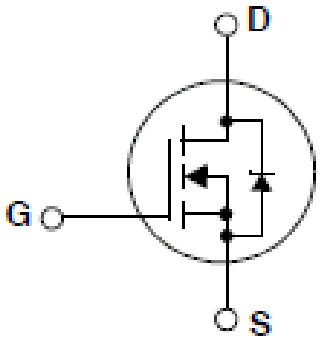
Low RD_s(on) (0.023 Ω)@Vgs=10V

Low Gate Charge (Typical 39 nC)

Low Crss (typical 110 pF)

Maximum Junction Temperature range (175 ℃)





Absolute maximum ratings T=25℃ unless otherwise noted

Characteristics	Symbol	Value	Units
Drain-SourceVoltage	BV_{DSS}	60	V
Drain Current	I_D	50	A
Gate-Source Voltage	V_{GS}	±20	V
Single Pulsed Avalanche Energy	E_{AS}	470	mJ
Power Dissipation	P_D	130	W
Operating and Storage Temperature Range	T_{STG}	-55 –175	℃
Thermal Resistance ,Junction-to Case	$R\theta_{JC}$	1.15	℃/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}=±20V, V_{DS}=0V
Zero Gate voltage Drain current	I_{DSS}	-	-	10	μA	V_{DS}=60V, V_{GS}=0V
Static drain-source on-resistance	R_{DS}(on)	-	18	23	mΩ	V_{GS}=10V , I_D=25A
Input capacitance	C_{iss}	-	880	1140	pF	V_{GS}=0V,V_{DS}=25V, F=1.0MHZ
Output capacitance	C_{oss}	-	430	560		
Reverse transfer capacitance	C_{rss}	-	110	140		
Turn-on delay time	td (on)	-	60	130	ns	V_{DD}=30V,I_D=25A, R_G=50Ω
Turn-on rise time	t_r	-	185	380		
Turn-off delay time	td (off)	-	75	160		
Turn-off fall time	t_f	-	60	130		
Total Gate charge	Q_g	-	39	45	nC	V_{DS}=48V,V_{GS}=10V, I_D=50A,
Gate-source charge	Q_{gs}	-	9.5	-		
Gate-drain charge	Q_{gd}	-	1.3	-		