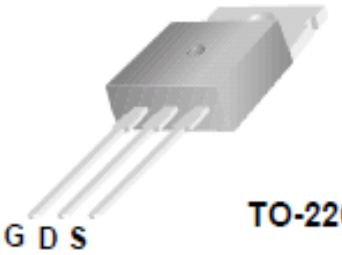
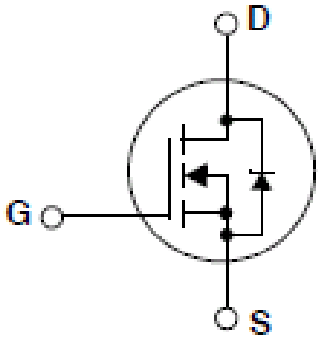
GFP 740

General description

- These N-channel enhancement mode silicon gate power field effect transistor is an advanced power MOSFET designed, tested and guranteed to withstand a specified level of energy in the breakdown avalanche mode of operation
- All of these power MOSFETs are designed for applications such as switching convertors relay drivers. These types can be operated directly from integrated circuits.





Absolute maximum ratings T=25℃ unless otherwise noted

Characteristics	Symbol	Value	Units
Drain-SourceVoltage	BV_{DSS}	400	V
Drain Current	I_D	10	A
Gate-Source Voltage	V_{GS}	±20	V
Single Pulsed Avalanche Energy	E_{AS}	520	mJ
Power Dissipation	P_D	125	W
Operating and Storage Temperature Range	T_{STG}	-55 –150	℃
Thermal Resistance ,Junction-to Case	$R\theta_{JC}$	1..67	℃/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}=400V, V_{GS}=0V
Static drain-source on-resistance	R_{DS}(on)	-	0.47	0.55	Ω	V_{GS}=10V , I_D=5A
Input capacitance	C_{iss}	-	1250	-	pF	V_{GS}=0V,V_{DS}=25V, F=1.0MHZ
Output capacitance	C_{oss}	-	300	-		
Reverse transfer capacitance	C_{rss}	-	80	-		
Turn-on delay time	td (on)	-	15	21	ns	V_{DD}=200V,I_D=10A, R_G=9.1Ω R_L=35Ω V_{GS}=10V
Turn-on rise time	t_r	-	25	41		
Turn-off delay time	td (off)	-	52	75		
Turn-off fall time	t_f	-	25	36		
Total Gate charge	Q_g	-	41	63	nC	V_{DS}=320V,V_{GS}=10V, I_D=10A,
Gate-source charge	Q_{gs}	-	6.5	-		
Gate-drain charge	Q_{gd}	-	23	-		