N-Channel Power Mosfet

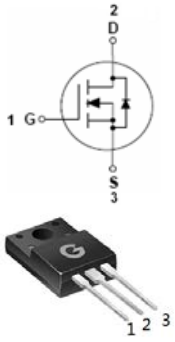
BLR7N65F

Features

- $R_{DS(ON)}$=1.35Ω@V_{GS} = 10V.
- Ultra Low Gate Charge (Typical 30nC).
- Low Reverse Transfer Capacitance.
  (C_{RSS} = Typical 18 pF)
- Fast Switching Capability.
- Avalanche Energy Specified.
- Improved dv/dt Capability, High Ruggedness.

Lead-free

HF



BLR7N65F

ITO-220AB

Mechanical Data

- Case: ITO-220AB.
- Molding Compound, UL Flammability Classification Rating 94V-0.
- Terminals: Matte Tin Plated Leads, Solderable Per MIL-STD-202, Method 208.

Ordering Information

Part Number	Package	Shipping	Marking Code
BLR7N65F□	ITO-220AB	50/Tube	R7N65F

□: none is for Lead Free package;
"G" is for Halogen Free package.

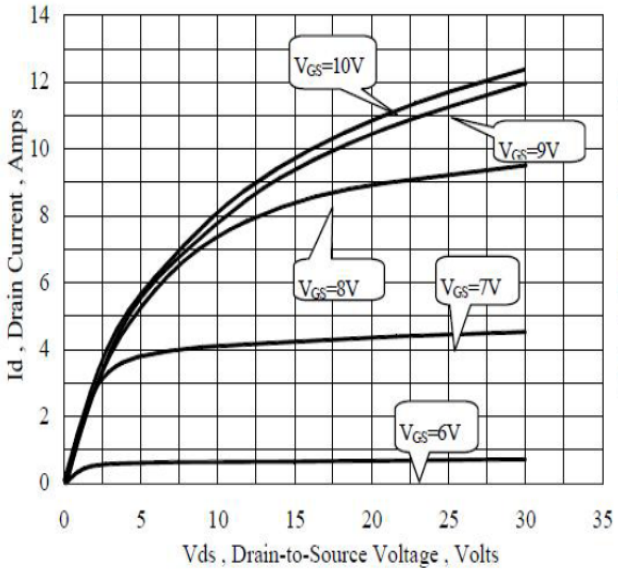
Maximum Ratings (@T_A=25℃ unless otherwise specified)

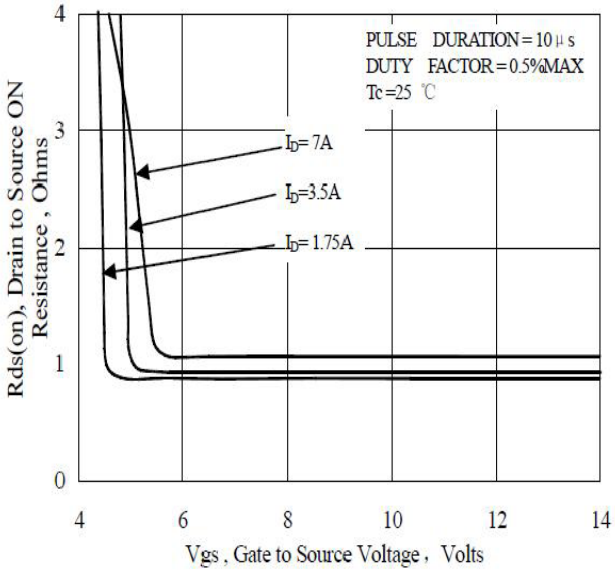
Symbol	Parameter	Value	Units
V_{DSS}	Drain-Source Voltage	650	V
V_{GSS}	Gate -Source Voltage	±30	V
I_D	Continuous Drain Current	7	A
I_{DM}	Pulsed Drain Current	28	A
E_{AS}	Single Pulse Avalanche Energy	450	mJ
P_D	Power Dissipation	2.5	W
T_J	Junction Temperature	-55 to +150	℃
T_{STG}	Storage Temperature Range	-55 to +150	℃

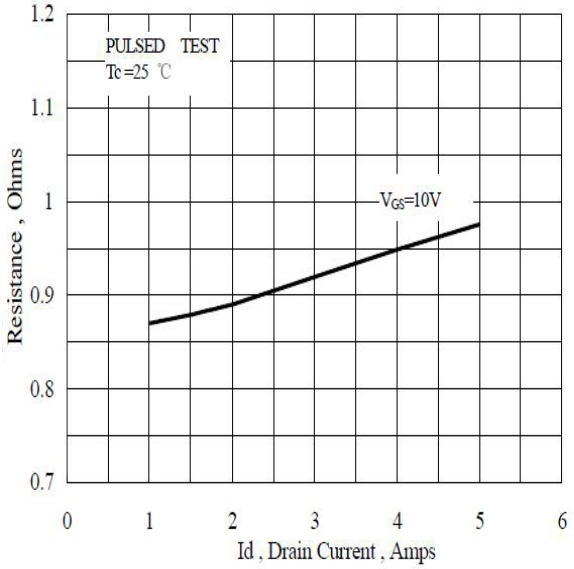
Electrical Characteristics (@T_A=25℃ unless otherwise specified)

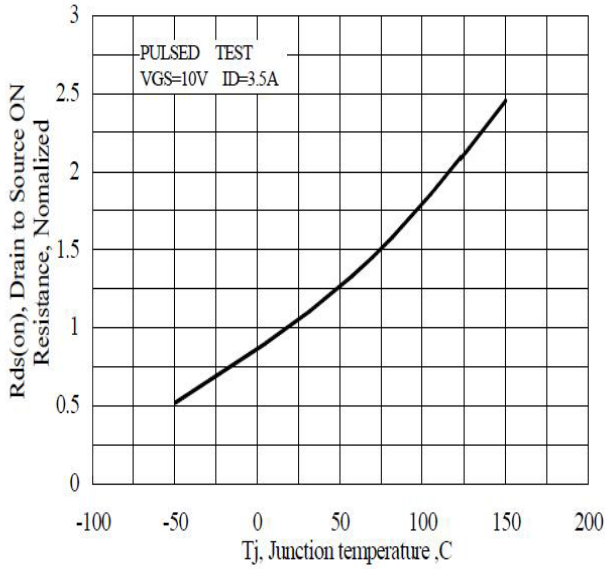
Symbol	Parameter	Test conditions	MIN	TYP	MAX	UNIT
OFF Characteristics						
V_{DSS}	Drain-Source Breakdown Voltage	V_{GS}=0V,I_D=250uA	650	-	-	V
I_{DSS}	Drain to Source Leakage Current	V_{DS}=650V, V_{GS}=0V	-	-	1	uA
I_{GSS}	Gate-body Leakage	V_{GS}=±30V, V_{DS}=0V	-	-	±100	uA
ON Characteristics						
$R_{DS(ON)}$	Static Drain-Source On-resistance	V_{GS}=10V,I_D=3.5A	-	-	1.4	Ω
$V_{GS(TH)}$	Gate Threshold Voltage	V_{DS}= V_{GS}, I_D=250μA	2	-	4	V
Dynamic Characteristics						
Ciss	Input Capacitance	V_{GS} = 0V	-	1123	-	pF
Coss	Output Capacitance	V_{DS} = 25V	-	110	-	
Crss	Reverse Transfer Capacitance	f = 1.0MHz	-	11	-	

Ratings and Characteristic Curves (T_A=25℃ unless otherwise noted)



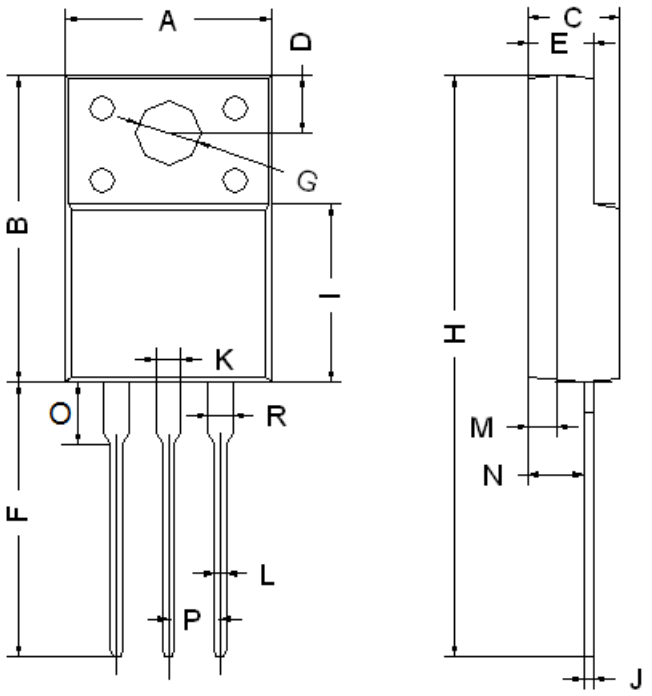






Package Outline Dimensions(unit:mm)

ITO-220AB



ITO-220AB		
Dim	Min	Max
A	9.90	10.30
B	14.80	15.20
C	4.30	4.70
D	2.50	2.90
E	2.80	3.30
F	13.00	13.60
G	3.10	3.30
H	28.00	28.60
I	7.90	8.90
J	0.40	0.60
L	0.70	0.90
M	1.30	1.50
N	2.60	2.80
O	2.60	3.10
P	2.45	2.65
K/R	1.10	1.30

IMPORTANT NOTICE