

7A,650VN-ChannelPowerMosfet

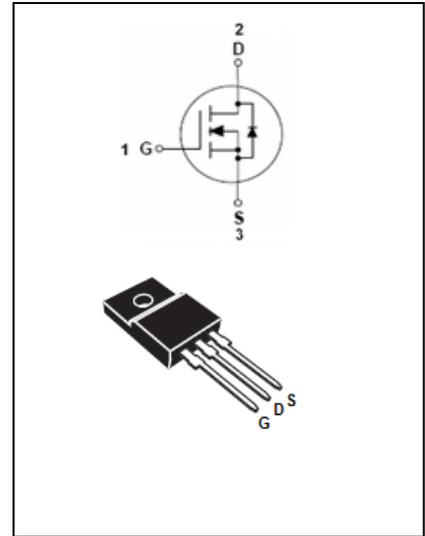
BL7N65F

FEATURES

- $R_{DS(ON)}=1.35\Omega@V_{GS} = 10V$
- Ultra low gate charge (typical 30nC)
- Low reverse transfer Capacitance ($CRSS = \text{typical } 18 \text{ pF}$)
- Fast switching capability
- Avalanche energy specified
- Improved dv/dt capability, high ruggedness



Lead-free



ITO-220AB

MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

| Symbol | Parameter | Value | Units |
|--------------------|----------------------------------|-------------|------------------|
| V_{DSS} | Drain-Source voltage | 650 | V |
| V_{GSS} | Gate -Source voltage | ± 20 | V |
| I_D | Continuous DrainCurrent | 7.0 | A |
| I_{DM} | Pulsed Drain Current | 28 | A |
| E_{AS} | Avalanche Energy | 450 | mJ |
| | Single Pulsed | | |
| P_D | Power Dissipation | 100 | W |
| T_J | Junction Temperature | +150 | $^\circ\text{C}$ |
| T_{OPR}, T_{stg} | Operatingand Storage Temperature | -55 to +150 | $^\circ\text{C}$ |

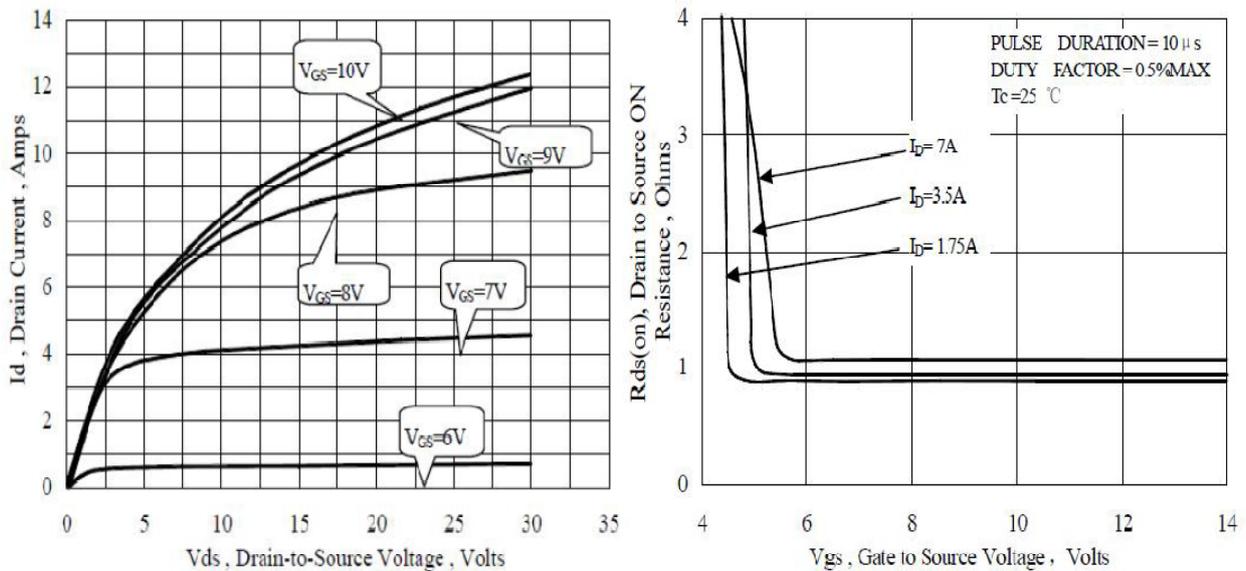
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ELECTRICAL CHARACTERISTICS@ Ta=25°C unless otherwise specified

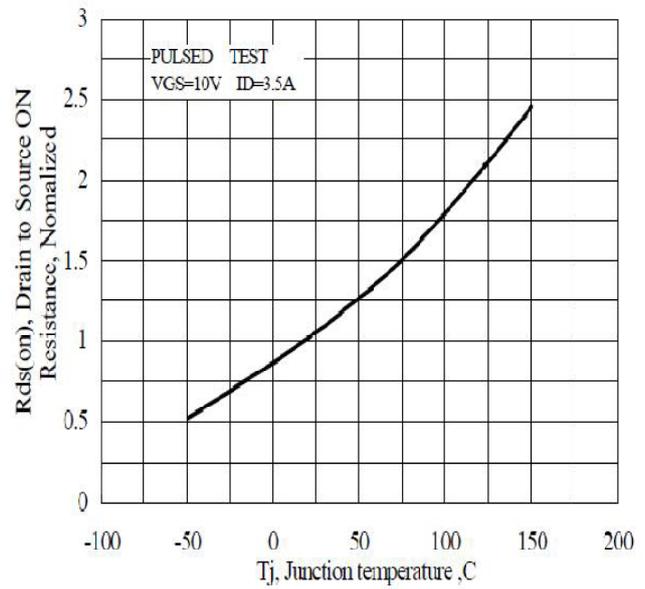
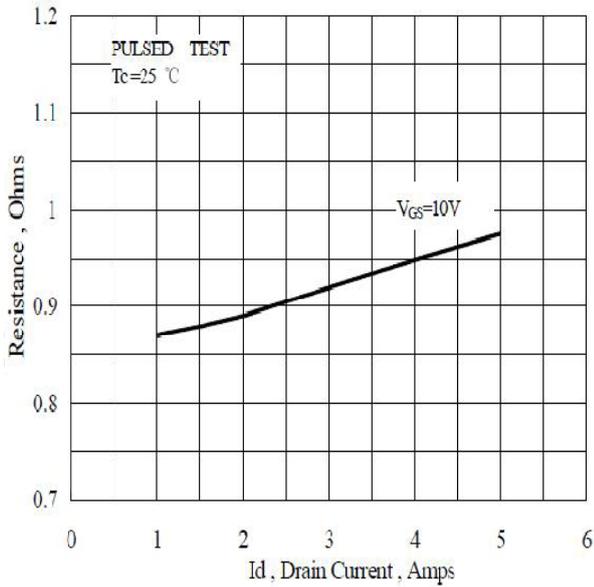
| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|-----------------------------------|--------------|-----------------------------------|-----|------|-----------|----------|
| OFF CHARACTERISTICS | | | | | | |
| Drain-Source Breakdown Voltage | BV_{DSS} | $V_{GS}=0V, I_D=250\mu A$ | 650 | - | - | V |
| Zero Gate Voltage Drain Current | I_{DSS} | $V_{DS}=650V, V_{GS}=0V$ | - | - | 1 | μA |
| Gate-body Leakage | I_{GSS} | $V_{DS}=0V, V_{GS}=\pm 20V$ | - | - | ± 100 | nA |
| ON CHARACTERISTICS | | | | | | |
| GateThreshold Voltage | $V_{GS(th)}$ | $V_{DS}=V_{GS}, I_D=250\mu A$ | 2.0 | - | 4.0 | V |
| Static drain-Source on-resistance | $R_{DS(on)}$ | $V_{GS}=10V, I_D=3.5A$ | - | - | 1.4 | Ω |
| DYNAMIC CHARACTERISTICS | | | | | | |
| Input capacitance | C_{ISS} | $V_{DS}=25V, V_{GS}=0V, f=1.0MHz$ | - | 1123 | - | pF |
| Output capacitance | C_{OSS} | | - | 110 | - | |
| Reverse transfer capacitance | C_{RSS} | | - | 11 | - | |

TYPICAL CHARACTERISTICS@ Ta=25°C unless otherwise specified



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PACKAGE OUTLINE

Plastic surface mounted package ITO-220AB

