

INCHANGE SEMICONDUCTOR

Isc N-Channel MOSFET Transistor

IPB65R660CFD

• FEATURES

- With To-263(D2PAK) package
- · Low input capacitance and gate charge
- · Low gate input resistance
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

Switching applications

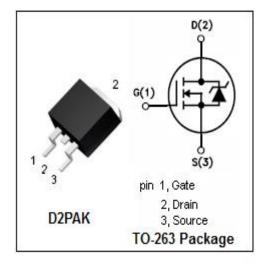
| • ABSOLUTE MAXIMUM RATINGS(Ta=25°C) | | | | | | | |
|-------------------------------------|---|------------|------|--|--|--|--|
| SYMBOL | PARAMETER | VALUE | UNIT | | | | |
| V _{DSS} | Drain-Source Voltage | 650 | V | | | | |
| V _{GSS} | Gate-Source Voltage | ±30 | ∧v | | | | |
| ID | Drain Current-ContinuousTc=25℃ Tc=100℃ | 6.0 3.8 | A | | | | |
| I _{DM} | Drain Current-Single Pulsed | 17 | А | | | | |
| PD | Total Dissipation @Tc=25°C | 63 | W | | | | |
| T _{ch} | Max. Operating Junction Temperature | 150 | °C | | | | |
| T _{stg} | Storage Temperature | -55~150 | °C | | | | |

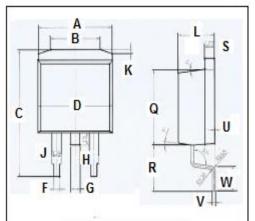
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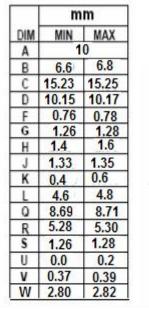
THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | | UNIT | |
|-----------|--|-----|--------------|--|
| Rth(ch-c) | Channel-to-case thermal resistance | 2.0 | °C /W | |
| Rth(ch-a) | h-a) Channel-to-ambient thermal resistance | | °C /W | |

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ELECTRICAL CHARACTERISTICS

 $T_{\text{C}}\text{=}25^\circ\!\!\mathbb{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | ТҮР | МАХ | UNIT |
|----------------------|--------------------------------|---|-----|-----|----------|------|
| BV _{DSS} | Drain-Source Breakdown Voltage | V _{GS} =0V; I _D =1mA | 650 | | | v |
| V _{GS} (th) | Gate Threshold Voltage | V _{DS} =V _{GS} ; I _D =0.21mA | 3.5 | | 4.5 | v |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D =2.1A | | 590 | 660 | mΩ |
| I _{GSS} | Gate-Source Leakage Current | V _{GS} = ±20V;V _{DS} =0V | | | ±0.1 | μA |
| I _{DSS} | Drain-Source Leakage Current | V _{DS} =600V; V _{GS} = 0V;Tj=25℃ V _{DS} =600V; V _{GS} = 0V;Tj=150℃ | | | 5 600 | μA |
| V _{SDF} | Diode forward voltage | I _{SD} =3.2A, V _{GS} = 0 V | | 0.9 | | V |

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