

isc N-Channel MOSFET Transistor

FDP3632

• FEATURES

- With TO-220 packaging
- · Drain Source Voltage-
 - : V_{DSS}≥100V
- Static drain-source on-resistance:
 R_{DS}(on) ≤ 9mΩ@V_{GS}=10V
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



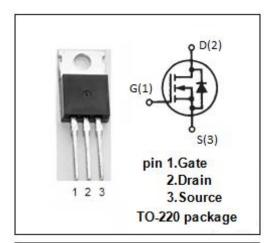
- Power supply
- · Switching applications

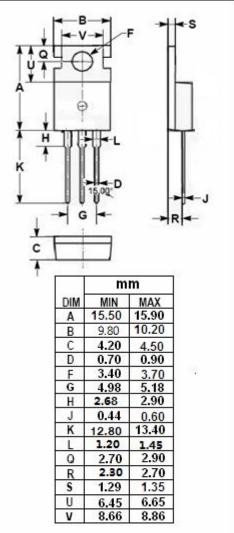
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|----------------------------------|---------|------------|
| V _{DSS} | Drain-Source Voltage | 100 | V |
| V_{GSS} | Gate-Source Voltage | ±20 | ٧ |
| I _D | Drain Current-Continuous;@Tc=25℃ | 80 | Α |
| P _D | Total Dissipation | 310 | W |
| Tj | Operating Junction Temperature | -55~175 | $^{\circ}$ |
| T _{stg} | Storage Temperature | -55~175 | $^{\circ}$ |

• THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|-----------|------------------------------------|------|------|
| Rth(ch-c) | Channel-to-case thermal resistance | 0.48 | °C/W |







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ELECTRICAL CHARACTERISTICS

Tc=25℃ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP | MAX | UNIT |
|---------------------|--------------------------------|--|-----|-----|----------|------|
| BV _{DSS} | Drain-Source Breakdown Voltage | V _{GS} =0V; I _D = 250uA | 100 | | | V |
| V _{GS(th)} | Gate Threshold Voltage | V _{DS} =V _{GS} ; I _D =250uA | 2 | | 4 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D = 80A | | | 9 | mΩ |
| I _{GSS} | Gate-Source Leakage Current | V_{GS} = $\pm 20V; V_{DS}$ = $0V$ | | | ±100 | nA |
| I _{DSS} | Drain-Source Leakage Current | V _{DS} = 80V; V _{GS} = 0V V _{DS} = 80V; V _{GS} = 0V;T _J =150°C | | | 1 250 | μА |
| V _{SDF} | Diode forward voltage | I _{SD} = 80A, V _{GS} = 0 V | | | 1.25 | V |

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