

INCHANGE SEMICONDUCTOR

Isc N-Channel MOSFET Transistor

IXTA60N10T

FEATURES

- With TO-263(D2PAK) packaging
- Low gate charge
- High speed switching
- Low on-resistance
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

Switching applications

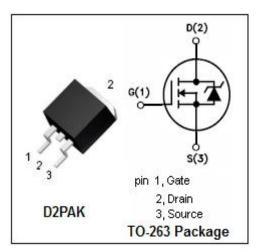
• ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

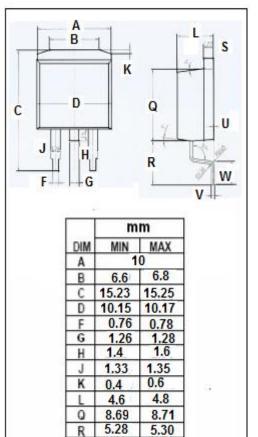
| SYMBOL | PARAMETER | VALUE | UNIT | |
|------------------|---------------------------------|---------|------|--|
| V _{DSS} | Drain-Source Voltage | 100 | V | |
| V _{GSS} | Gate-Source Voltage | ±30 | V | |
| ID | Drain Current-Continuous 60 | | А | |
| I _{DM} | Drain Current-Single Pulsed 180 | | А | |
| P _D | Total Dissipation | 176 | W | |
| Tj | Operating Junction Temperature | -55~175 | °C | |
| T _{stg} | Storage Temperature | -55~175 | °C | |

• THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | | UNIT |
|-----------|------------------------------------|------|--------------|
| Rth(ch-c) | Channel-to-case thermal resistance | 0.85 | °C /W |

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1.28

0.2

0.39

2.82

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W

1.26

0.0

0.37

2.80



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ELECTRICAL CHARACTERISTICS

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

| SYMBOL | PARAMETER | CONDITIONS | MIN | ТҮР | MAX | UNIT |
|----------------------|--------------------------------|----------------------------------------------------------------|-----|------|----------|------|
| BV _{DSS} | Drain-Source Breakdown Voltage | V _{GS} =0V; I _D = 0.25mA | 100 | | | V |
| V _{GS} (th) | Gate Threshold Voltage | V _{DS} =±30V; I _D =0.05mA | 2.5 | | 4.5 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D =25A | | 14.8 | 18 | mΩ |
| I _{GSS} | Gate-Source Leakage Current | V _{GS} = ±30V;V _{DS} =0V | | | ±0.1 | μA |
| I _{DSS} | Drain-Source Leakage Current | V _{DS} = 100V; V _{GS} = 0V@Tc=25℃ Tc=125℃ | | | 1 100 | μA |
| V _{SDF} | Diode forward voltage | I _{SD} =25A, V _{GS} = 0 V | | | 1.2 | V |

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