

isc N-Channel MOSFET Transistor

2SK3530

D(2)

• FEATURES

- · With TO-220F packaging
- · High speed switching
- · Standard level gate drive
- · Easy to use
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



- Power supply
- · Switching applications



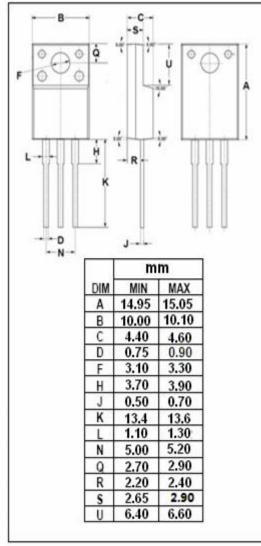


• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|--------------------------------|---------|------------|
| V _{DSS} | Drain-Source Voltage | 800 | V |
| V _{GSS} | Gate-Source Voltage | ±30 | V |
| lο | Drain Current-Continuous | 70 | А |
| I _{DM} | Drain Current-Single Pulsed | 28 | А |
| P_D | Total Dissipation | 70 | W |
| Tj | Operating Junction Temperature | 150 | $^{\circ}$ |
| T _{stg} | Storage Temperature | -55~150 | °C |

• THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | | UNIT | |
|-----------|---------------------------------------|------|------|--|
| Rth(ch-c) | Channel-to-case thermal resistance | 1.79 | °C/W | |
| Rth(ch-a) | Channel-to-ambient thermal resistance | 58 | °C/W | |



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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | ТҮР | MAX | UNIT |
|---------------------|--------------------------------|---|-----|-----|------|------|
| BV _{DSS} | Drain-Source Breakdown Voltage | V _{GS} =0V; I _D = 0.25mA | 800 | | | V |
| V _{GS(th)} | Gate Threshold Voltage | V _{DS} =V _{GS} ; I _D =0.25mA | 3.0 | | 5.0 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D =3.5A | | | 1.9 | Ω |
| lgss | Gate-Source Leakage Current | V _{GS} =±30V;V _{DS} = 0V | | | ±0.1 | μА |
| I _{DSS} | Drain-Source Leakage Current | V _{DS} = 800V; V _{GS} = 0V | | | 50 | μА |
| V _{SDF} | Diode forward voltage | I _{SD} =7A, V _{GS} = 0 V | | | 1.5 | V |

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