

isc N-Channel MOSFET Transistor

FKI10126

FEATURES

- Drain Current –I_D=41A@ T_C=25 $^\circ\!\mathrm{C}$
- Drain Source Voltage-: V_{DSS}=100V(Min)
- Static Drain-Source On-Resistance
- : $R_{DS(on)}$ =12.1m Ω (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

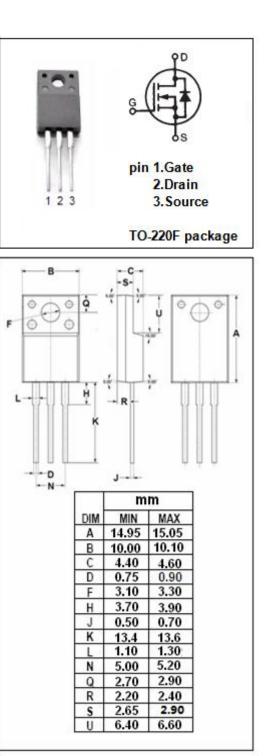
• Designed for use in switch mode power supplies and general purpose applications.

| SYMBOL | PARAMETER | VALUE | UNIT | | | | |
|------------------|-------------------------------------|---------------|------|--|--|--|--|
| V _{DSS} | Drain-Source Voltage | e Voltage 100 | | | | | |
| V _{GS} | Gate-Source Voltage-Continuous | ±20 | V | | | | |
| ID | Drain Current-Continuous 41 | | А | | | | |
| P _D | Total Dissipation @Tc=25°C 42 | | w | | | | |
| TJ | Max. Operating Junction Temperature | 150 | °C | | | | |
| T _{stg} | Storage Temperature | -55~150 | °C | | | | |

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|--------------------------------------|-----|------|
| R _{th j-c} | Thermal Resistance, Junction to Case | 3.0 | °C/W |





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ELECTRICAL CHARACTERISTICS

$T_c=25^{\circ}C$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | МАХ | UNIT |
|----------------------|---------------------------------|---|-----|------|------|
| V(BR)DSS | Drain-Source Breakdown Voltage | V _{GS} = 0; I _D = 0.1mA | 100 | | V |
| V _{GS} (th) | Gate Threshold Voltage | V _{DS} = V _{GS} ; I _D =1.5mA | 1 | 2.5 | V |
| $R_{\text{DS(on)}}$ | Drain-Source On-Resistance | V _{GS} = 10V; I _D =33A | | 12.1 | mΩ |
| I _{GSS} | Gate-Body Leakage Current | V _{GS} = ±20V;V _{DS} = 0 | | ±100 | nA |
| I _{DSS} | Zero Gate Voltage Drain Current | V _{DS} =100V; V _{GS} = 0 | | 100 | μA |
| V _{SD} | Forward On-Voltage | I _S =33A; V _{GS} = 0 | | 1.5 | V |

NOTICE:

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