

# isc N-Channel MOSFET Transistor

**FKI10531** 

### **FEATURES**

- Drain Current –I<sub>D</sub>=18A@ T<sub>C</sub>=25 °C
- Drain Source Voltage-
  - : V<sub>DSS</sub>=100V(Min)
- Static Drain-Source On-Resistance
  - :  $R_{DS(on)}$  =54.5m  $\Omega$  (Max)
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

# pin 1.Gate 2.Drain 3.Source TO-220F package

## **DESCRIPTION**

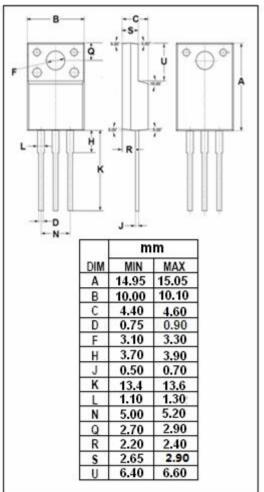
• Designed for use in switch mode power supplies and general purpose applications.

# ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>DSS</sub>	Drain-Source Voltage 100			
$V_{GS}$	Gate-Source Voltage-Continuous $\pm 20$		V	
I <sub>D</sub>	Drain Current-Continuous 18		А	
$P_D$	Total Dissipation @T <sub>C</sub> =25℃	32		
TJ	Max. Operating Junction Temperature	150	°C	
T <sub>stg</sub>	Storage Temperature	-55~150	$^{\circ}$	

# THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	3.9	°C/W





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### **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 0.1mA	100		V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> =0.35mA	1	2.5	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =11.9A		54.5	mΩ
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0		±100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =100V; V <sub>GS</sub> = 0		100	μА
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> =11.9A; V <sub>GS</sub> = 0		1.5	V



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