

# isc N-Channel MOSFET Transistor

### **FKP202**

### FEATURES

- Drain Current –I\_D=45A@ T\_C=25 $^\circ\!\mathrm{C}$
- Drain Source Voltage-: V<sub>DSS</sub>=200V(Min)
- Static Drain-Source On-Resistance
- :  $R_{DS(on)}$  = 53m  $\Omega$  (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### DESCRIPTION

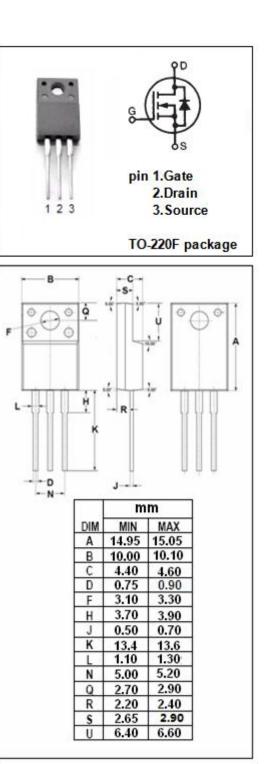
• Designed for use in switch mode power supplies and general purpose applications.

SYMBOL	PARAMETER	VALUE	UNIT			
V <sub>DSS</sub>	Drain-Source Voltage	200	V			
$V_{GS}$	Gate-Source Voltage-Continuous	±30	V			
I <sub>D</sub>	Drain Current-Continuous 45		A			
PD	Total Dissipation @T <sub>c</sub> =25℃	40	w			
TJ	Max. Operating Junction Temperature	150	°C			
T <sub>stg</sub>	Storage Temperature	-55~150	°C			

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	3.1	°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 <sub>GS</sub> = 0; I <sub>D</sub> = 0.1mA	200		V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = 10V; I <sub>D</sub> =1mA	3	4.5	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =22A		53	mΩ
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±30V;V <sub>DS</sub> = 0		±100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =200V; V <sub>GS</sub> = 0		100	μA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> =45A; V <sub>GS</sub> = 0		1.5	V

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