

# isc N-Channel MOSFET Transistor

# IXKP24N60C5

#### • FEATURES

- Static drain-source on-resistance:
  R<sub>DS</sub>(on) ≤ 0.165Ω@V<sub>GS</sub>=10V
- Fully characterized avalanche voltage and current
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



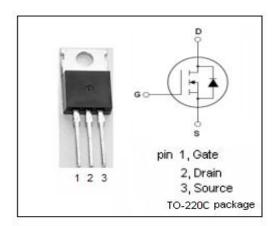
- · Switched mode power supplies
- · Uninterruptible power supplies

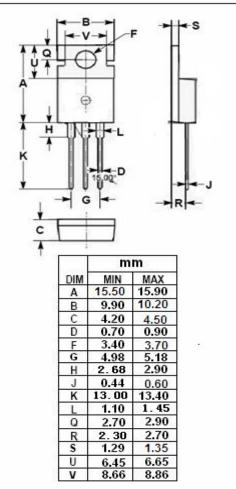
## • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>DSS</sub>	Drain-Source Voltage	600	V	
V <sub>GS</sub>	Gate-Source Voltage	±20	V	
I <sub>D</sub>	Drain Current-Continuous	24	А	
Tj	Operating Junction Temperature	-55~150	$^{\circ}$ C	
T <sub>stg</sub>	Storage Temperature	-55~150	$^{\circ}$	

### • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th(j-c)</sub>	Junction-to-case thermal resistance	0.5	°C/W







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#### **ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
BV <sub>DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0V; ID = 250 μ A	600		V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; ID = 1.1mA	2.5	3.5	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> =10V; I <sub>D</sub> = 12A		165	mΩ
I <sub>GSS</sub>	Gate-Source Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> =0V		±100	nA
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> = V <sub>DSS</sub> ; V <sub>GS</sub> = 0V		1	μ Α
		V <sub>DS</sub> = V <sub>DSS</sub> ; V <sub>GS</sub> = 0V;T <sub>J</sub> = 125°C		10	
Vsp	Diode forward voltage	I <sub>F</sub> = 12A; V <sub>GS</sub> = 0V		1.2	V



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