

# isc N-Channel MOSFET Transistor

# IXKH30N60C5

### • FEATURES

- Static drain-source on-resistance:  
 $R_{DS(on)} \leq 125m\Omega @ V_{GS}=10V$
- Fully characterized avalanche voltage and current
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### • APPLICATION

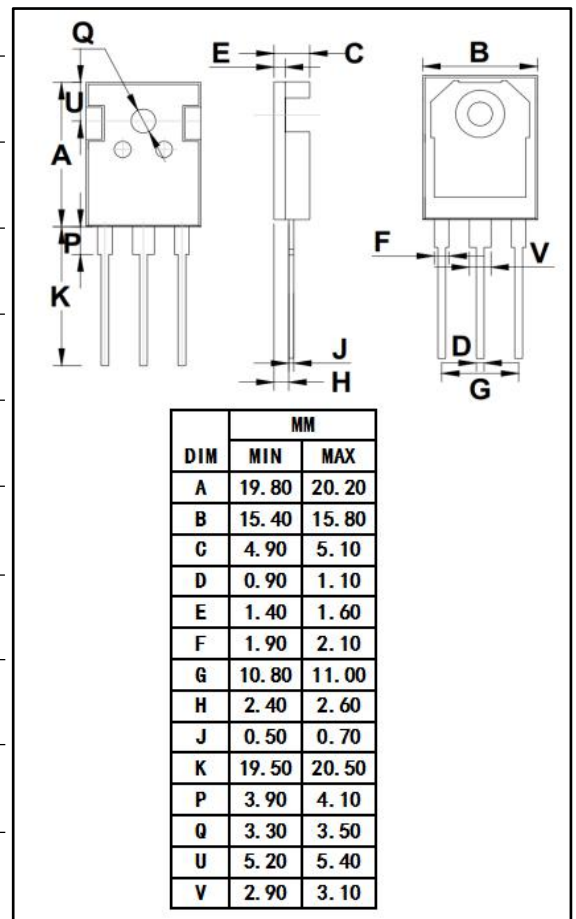
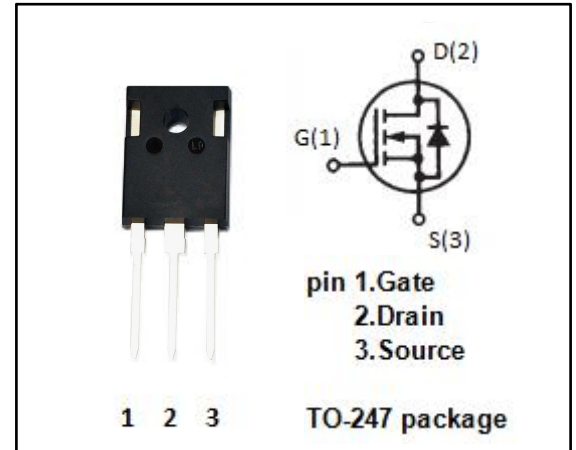
- Switched mode power supplies
- Uninterruptible power supplies

### • ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ C$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage	600	V
$V_{GS}$	Gate-Source Voltage	$\pm 20$	V
$I_D$	Drain Current-Continuous	30	A
$T_j$	Operating Junction Temperature	-55~150	$^\circ C$
$T_{stg}$	Storage Temperature	-55~150	$^\circ C$

### • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Junction-to-case thermal resistance	0.4	$^\circ C/W$



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## ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
BV <sub>DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0V; I <sub>D</sub> = 250 μ A	600		V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> = 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> = 16A		125	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		2	μ A
V <sub>SD</sub>	Diode forward voltage	I <sub>F</sub> = 16A; V <sub>GS</sub> = 0V		1.2	V

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