

isc N-Channel MOSFET Transistor
IXTQ150N06P
• FEATURES

- Drain Current $I_D=150A@ T_C=25^\circ C$
- Drain Source Voltage-
: $V_{DSS}= 60V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 10m\Omega (\text{Max})$
- Fast Switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

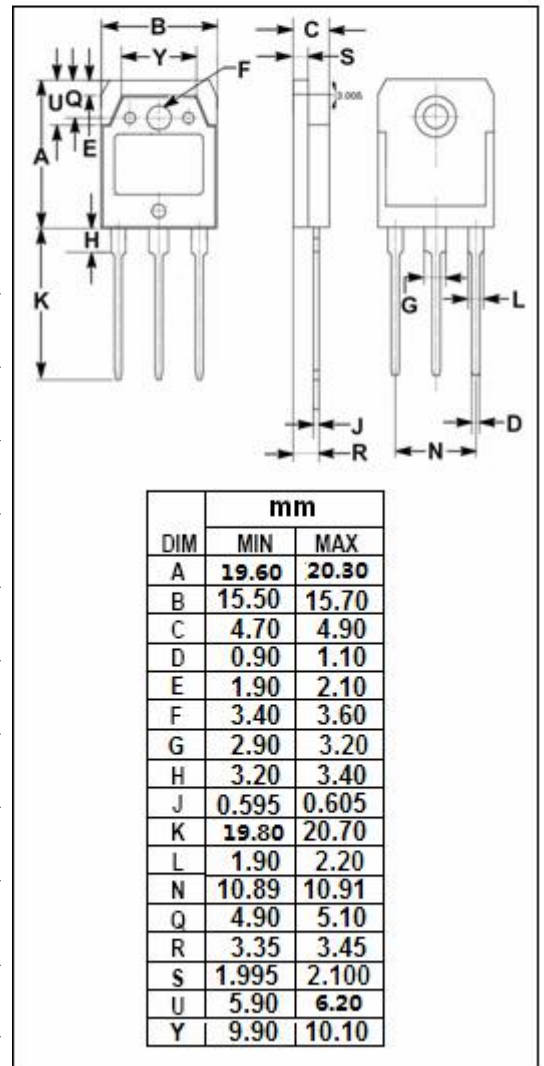
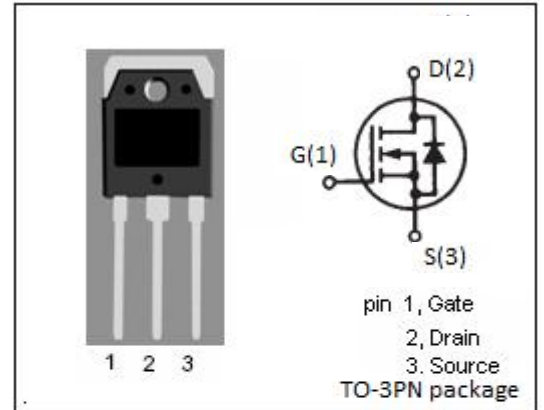
- Switch-Mode and Resonant-Mode Power Supplies
- DC-DC Converters
- AC and DC Motor Drives
- Robotics and Servo Controls

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	60	V
V_{GS}	Gate-Source Voltage-Continuous	± 20	V
I_D	Drain Current-Continuous	150	A
I_{DM}	Drain Current-Single Plused	280	A
P_D	Total Dissipation @ $T_C=25^\circ C$	480	W
T_j	Max. Operating Junction Temperature	-55~175	$^\circ C$
T_{stg}	Storage Temperature	-55~175	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	0.31	$^\circ C/W$



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• ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D =250μA	60			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D =250μA	2.5		5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 75A			10	mΩ
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±20V; V _{DS} = 0			±	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =55V; V _{GS} = 0 V _{DS} =55V; V _{GS} = 0; T _J =150°C			25	μA
V _{SD}	Diode Forward On-voltage	I _F =150A; V _{GS} = 0			1.5	V

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