

isc N-Channel MOSFET Transistor
IXTH220N20
FEATURES

- Drain Current $-I_D = 220A @ T_C = 25^\circ C$
- Drain Source Voltage $-V_{DSS} = 200V(\text{Min})$
- Static Drain-Source On-Resistance
 $-R_{DS(on)} = 5.5m\Omega(\text{Max}) @ V_{GS} = 10V$

DESCRIPTION

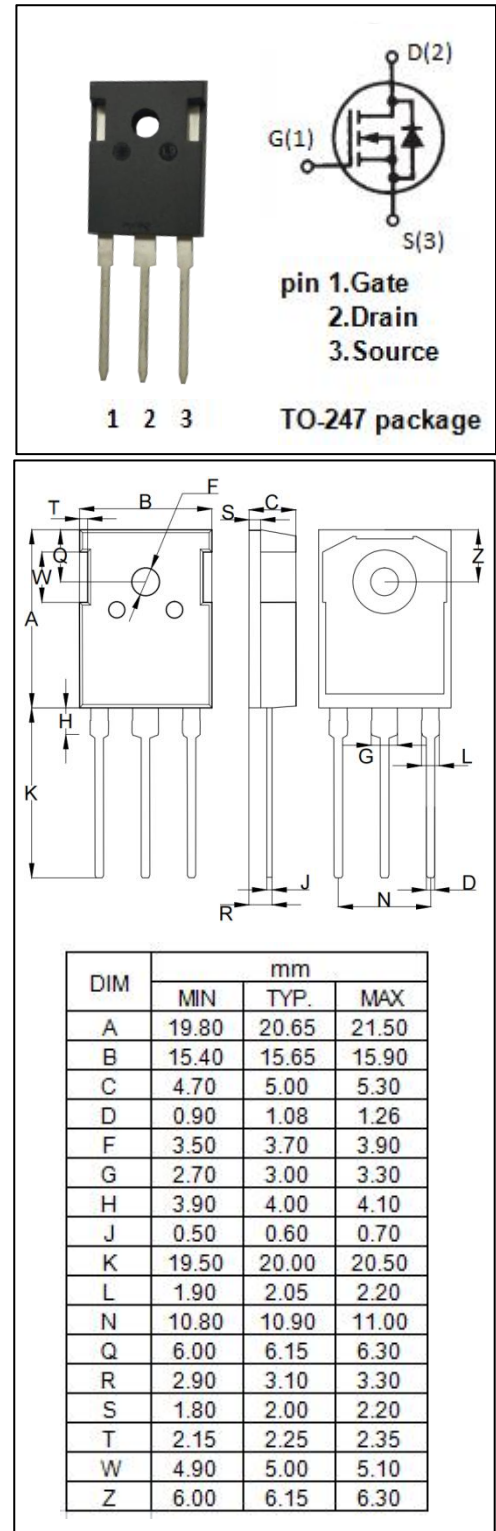
- Switch-Mode and Resonant-Mode Power Supplies
- DC-DC Converters
- PFC Circuits
- AC and DC Motor Drives
- Robotics and Servo Controls

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	200	V
V_{GS}	Gate-Source Voltage-Continuous	± 20	V
I_D	Drain Current-Continuous	220	A
I_{DM}	Drain Current-Single Pulse	400	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	800	W
T_J	Max. Operating Junction Temperature	175	$^\circ C$
T_{stg}	Storage Temperature	-55~175	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	0.19	$^\circ C/W$



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ELECTRICAL CHARACTERISTICS (T_c=25°C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 0.25mA	200	--	V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = 0.25mA	2.5	4.5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 110A	--	5.5	mΩ
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±20V; V _{DS} = 0	--	±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 200V; V _{GS} = 0	--	10	uA
V _{SD}	Forward On-Voltage	I _F = 100A; V _{GS} = 0	--	1.4	V

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