

isc P-Channel MOSFET Transistor

IXTH36P10

• FEATURES

- Static drain-source on-resistance:
 $R_{DS(on)} \leq 75m\Omega @ V_{GS} = -10V$
- Fully characterized avalanche voltage and current
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATION

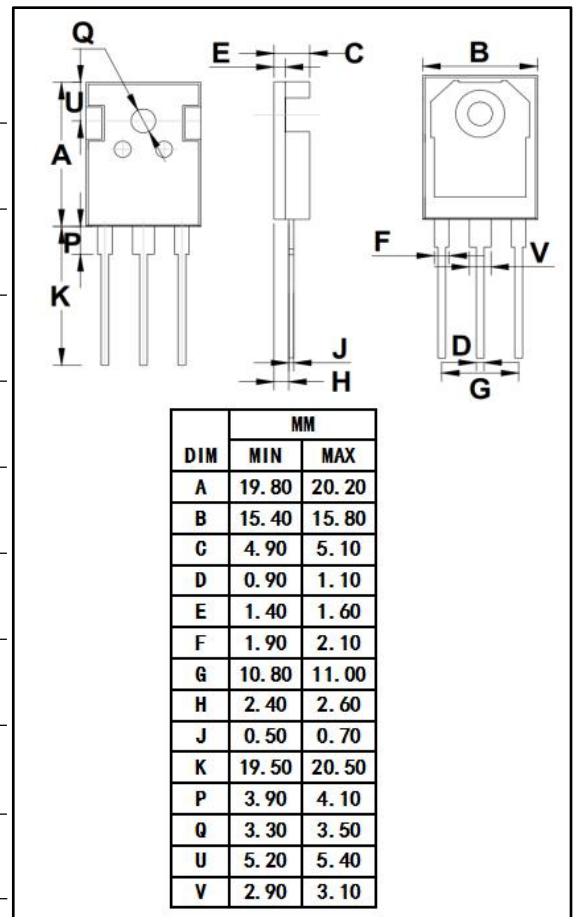
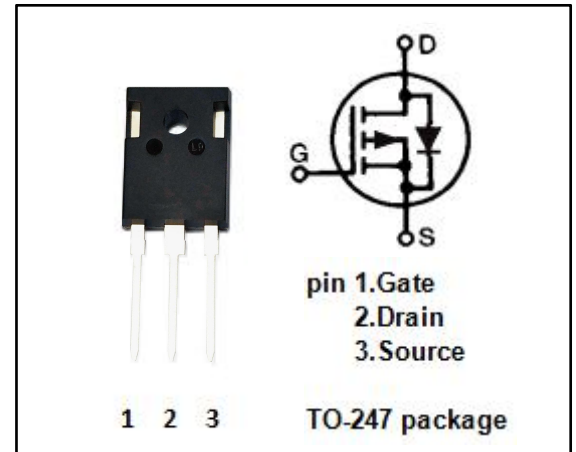
- Switched mode power supplies
- Uninterruptible power supplies

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	-100	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-Continuous	-36	A
I_{DM}	Drain Current-Single Pulsed	-144	A
P_D	Total Dissipation @ $T_c=25^\circ C$	180	W
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	0.65	$^\circ C/W$



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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0V; I _D = -250 μ A	-100		V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = -250uA	-3	-5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =-10V; I _D = -18A		75	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±20V; V _{DS} =0V		± 100	nA
I _{DSS}	Drain-Source Leakage Current	V _{DS} = -80V; V _{GS} = 0V V _{DS} = -80V; V _{GS} = 0V; T _J = 125°C		-25 -1000	μ A
V _{SD}	Diode forward voltage	I _F = -36A; V _{GS} = 0V		-3	V

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