

isc N-Channel MOSFET Transistor

IXTP2N100P

FEATURES

- Static drain-source on-resistance: $R_{DS}(on) \le 7.5 \Omega @V_{GS} = 10V$
- Fully characterized avalanche voltage and current
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



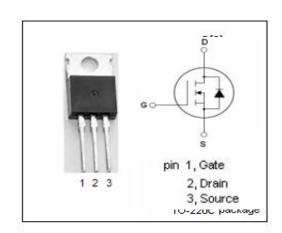
- DC/DC Converter
- · Switch-Mode and Resonant-Mode Power Supplies

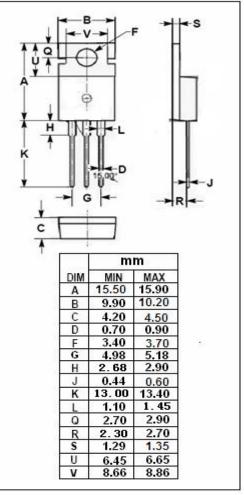
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT	
V _{DSS}	Drain-Source Voltage	1000	V	
V _{GS}	Gate-Source Voltage	±20	V	
I _D	Drain Current-Continuous	2	А	
I _{DM}	Drain Current-Single Pulsed	5	А	
P _D	Total Dissipation @T _C =25℃	86	W	
Tj	Operating Junction Temperature	-55~150	$^{\circ}$ C	
T _{stg}	Storage Temperature	-55~150	${\mathbb C}$	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT	
R _{th(j-c)}	Junction-to-case thermal resistance	1.45	°C/W	







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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; ID = 250 μ A	1000		V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} ; ID = 100 μ A	2.5	4.5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D = 1A		7.5	Ω
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±20V;V _{DS} =0V		±50	nA
I _{DSS}	Drain-Source Leakage Current	V _{DS} = V _{DSS} ; V _{GS} = 0V		5	μ А
		V _{DS} = V _{DSS} ; V _{GS} = 0V;T _J = 125°C		250	
Vsp	Diode forward voltage	I _F = 2A; V _{GS} = 0V		1.5	V



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