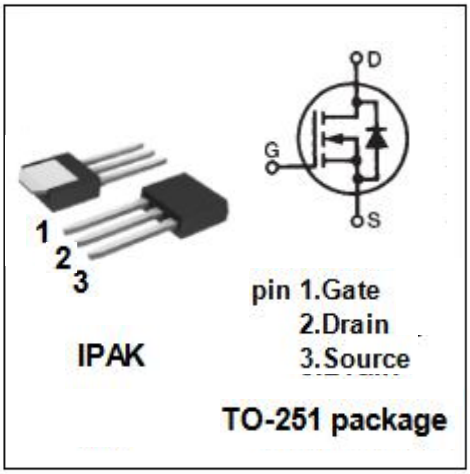
isc N-Channel MOSFET Transistor IXTU1R4N60P



- **FEATURES**
- Static drain-source on-resistance:
  $R_{DS}(on) \leq 9.0\Omega @ V_{GS}=10V$
- Fully characterized avalanche voltage and current
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

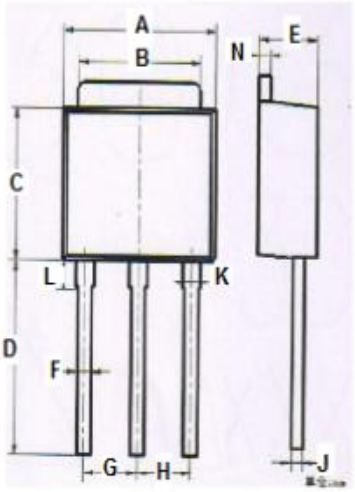
- **APPLICATION**
- DC/DC Converter
- Ideal for high-frequency switching and synchronous rectification

- **ABSOLUTE MAXIMUM RATINGS(T_a=25℃)**

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	600	V
V_{GS}	Gate-Source Voltage	±30	V
I_D	Drain Current-Continuous	1.4	A
I_{DM}	Drain Current-Single Pulsed	2.1	A
P_D	Total Dissipation @T_C=25℃	50	W
T_j	Operating Junction Temperature	-55~150	℃
T_{stg}	Storage Temperature	-55~150	℃

- **THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Junction-to-case thermal resistance	2.5	℃/W



DIM	mm MIN	MAX
A	6.40	6.48
B	5.10	5.50
C	5.80	6.20
D	9.20	9.60
E	2.20	2.40
F	0.50	0.70
G	2.09	2.49
H	2.09	2.49
J	0.40	0.60
K	0.70	0.90
L	1.60	2.00
N	0.40	0.60

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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; I_D = 25 μ A	600		V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}=V_{GS}; I_D = 25 μ A	3.0	5.5	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}=10V; I_D= 0.7A		9.0	Ω
I_{GSS}	Gate-Source Leakage Current	V_{GS}= ±30V;V_{DS}=0V		±50	nA
I_{DSS}	Drain-Source Leakage Current	V_{DS}= V_{DSS}; V_{GS}= 0V		1	μ A
		V_{DS}= V_{DSS}; V_{GS}= 0V;T_J= 125℃		20	
V_{SD}	Diode forward voltage	I_F= 1.4A; V_{GS} = 0V		1.5	V