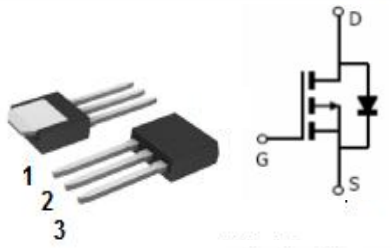
isc P-Channel MOSFET Transistor SPU30P06P

·FEATURES

- Static drain-source on-resistance:
  $R_{DS(on)} \leqslant 75m\Omega$(@$V_{GS}$= -10V; I_D= -21.5A)
- Advanced trench process technology
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

- Fast switching application.



pin 1, Gate
2, Drain
3, Source

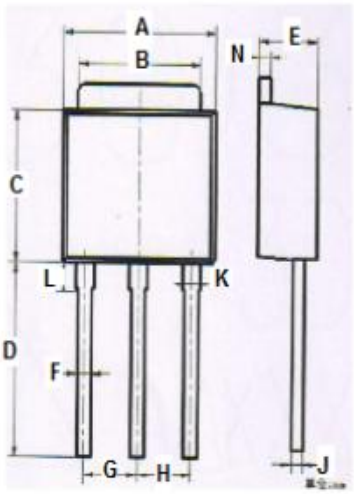
IPAK TO-251 Package

• ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	-60	V
V_{GS}	Gate-Source Voltage	±20	V
I_D	Drain Current-Continuous	-30	A
P_D	Total Dissipation @T_C=25℃	125	W
T_j	Max. Operating Junction Temperature	-55~175	℃
T_{stg}	Storage Temperature	-55~175	℃

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(j-c)	Channel-to-case thermal resistance	1.2	℃/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

isc P-Channel MOSFET Transistor SPU30P06P

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= -250uA	-60		V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}=V_{GS}; I_D= -1.7mA	-2.1	-4	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= -10V; I_D= -21.5A		75	mΩ
I_{GSS}	Gate-Source Leakage Current	V_{GS}= ±20V; V_{DS}= 0V		±100	nA
I_{DSS}	Drain-Source Leakage Current	V_{DS}= -60V; V_{GS}= 0V		-1	μA
V_{SD}	Diode forward voltage	I_s= -30A, V_{GS} = 0V		-1.7	V