

Isc N-Channel MOSFET Transistor

SPU04N60C3

• FEATURES

- With To-251(IPAK) package
- New revolutionary high voltage technology
- Ultra low gate charge
- High peak current capability
- Improved transconductance
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

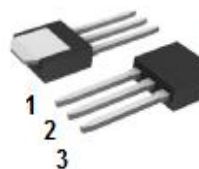
- Switching applications

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

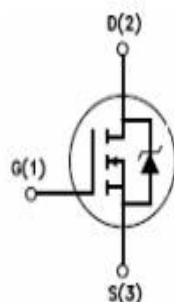
SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage	600	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-Continuous@ $T_c=25^{\circ}\text{C}$ $T_c=125^{\circ}\text{C}$	4.5 2.8	A
I_{DM}	Drain Current-Single Pulsed	13.5	A
P_D	Total Dissipation @ $T_c=25^{\circ}\text{C}$	50	W
T_{ch}	Max. Operating Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~150	$^{\circ}\text{C}$

• THERMAL CHARACTERISTICS

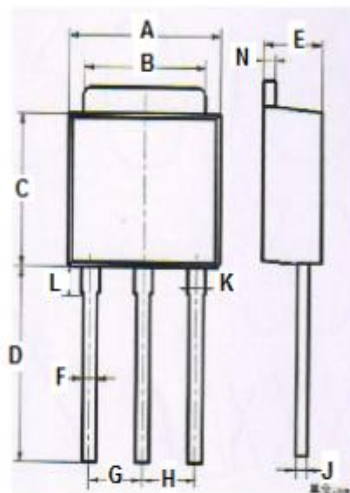
SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	2.5	$^{\circ}\text{C/W}$
$R_{th(ch-a)}$	Channel-to-ambient thermal resistance	75	$^{\circ}\text{C/W}$



IPAK



TO-251 Package



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 N-Channel MOSFET Transistor**SPU04N60C3****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	$V_{GS}=0V; I_D=0.25mA$	600			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}= \pm 30V; I_D=0.2mA$	2.1		3.9	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}= 10V; I_D=2.8A$		890	950	m Ω
I_{GSS}	Gate-Source Leakage Current	$V_{GS}= \pm 30V; V_{DS}= 0V$			± 0.1	μA
I_{DSS}	Drain-Source Leakage Current	$V_{DS}= 600V; V_{GS}= 0V; T_J=25^{\circ}\text{C}$ $T_J=125^{\circ}\text{C}$			1 50	μA
V_{SDF}	Diode forward voltage	$I_{SD}=4.5A, V_{GS}= 0 V$			1.2	V

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