

# isc N-Channel MOSFET Transistor

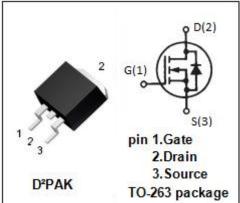
## SKI07074

### FEATURES

- Drain Current –I\_D= 85A@ T\_C=25 $^\circ\!\mathrm{C}$
- Drain Source Voltage-: V<sub>DSS</sub>= 75V(Min)
- Static Drain-Source On-Resistance
- :  $R_{DS(on)}$  = 6.9m  $\Omega$  (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### DESCRIPTION

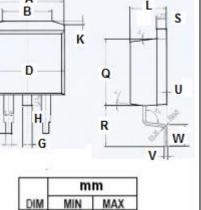
• Designed for use in switch mode power supplies and general purpose applications.



## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	75	V
$V_{GS}$	Gate-Source Voltage-Continuous	±20	V
ID	Drain Current-Continuous	85	A
I <sub>DM</sub>	Drain Current-Single Pluse	170	A
P <sub>D</sub>	Total Dissipation @T <sub>c</sub> =25℃	135	W
TJ	Max. Operating Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55~150	°C

# D<sup>2</sup>PAK 2.Drain 3.Source TO-263 package



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DIM	MIN	MAX	1
Α	1	0	٦
В	6.6	6.8	
С	15.23	15.25	1
D	10.15	10.17	
F	0.76	0.78	٦
G	1.26	1.28	
Н	1.4	1.6	
J	1.33	1.35	1
K	0.4	0.6	
L	4.6	4.8	
0	8.69	8.71	
R	5.28	5.30	
S	1.26	1.28	1
U	0.0	0.2	1
V	0.37	0.39	1
W	2.80	2.82	1

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	0.9	°C/W



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#### **ELECTRICAL CHARACTERISTICS**

#### $T_c=25^{\circ}C$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
V(BR)DSS	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 0.1mA	75		V
V <sub>GS</sub> (th)	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> = 1.5mA	1.0	2.5	V
$R_{\text{DS(on)}}$	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 44A		6.9	mΩ
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0		±100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 75V; V <sub>GS</sub> = 0		100	μA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 44A; V <sub>GS</sub> = 0		1.5	V

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