

# isc N-Channel MOSFET Transistor

## **R6524KNZ**

### **FEATURES**

- Drain Current -I<sub>D</sub>= 24A@ T<sub>C</sub>=25 °C
- Drain Source Voltage-
  - : V<sub>DSS</sub>=650V(Min)
- Static Drain-Source On-Resistance
  - :  $R_{DS(on)}$  = 185m  $\Omega$  (Max)
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### **DESCRIPTION**

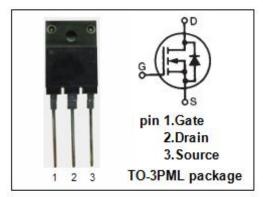
 Designed for use in switch mode power supplies and general purpose applications.

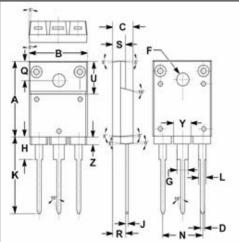
## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	650	V
V <sub>GS</sub>	Gate-Source Voltage-Continuous	±20	V
I <sub>D</sub>	Drain Current-Continuous	24	А
I <sub>DM</sub>	Drain Current-Single Pluse	72	А
P <sub>D</sub>	Total Dissipation @T <sub>C</sub> =25℃	74	W
TJ	Max. Operating Junction Temperature -55		°C
T <sub>stg</sub>	Storage Temperature -55~150		$^{\circ}$

### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	1.7	°C/W





	mm		
DIM	MIN	MAX	
Α	19.90	20.10	
В	15.75	16.10	
C	5.50	5.70	
D	0.90	1.10	
F	3.30	3.50	
G	2.90	3.20	
Н	5.90	6.10	
J	0.595	0.70	
K	21.10	22.50	
L	1.90	2.25	
N	10.80	11.00	
0	4.90	5.10	
R	3.75	3.95	
S	3.20	3.60	
U	9.90	10.10	
Y	4.20	4.90	
Z	1.90	2.10	



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### **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 1mA	650		V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> =750uA	3	5	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 11.3A		185	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> = 650V; V <sub>GS</sub> = 0 V <sub>DS</sub> = 650V; V <sub>GS</sub> = 0@T <sub>J</sub> =125°C		100 1000	μА
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 24A; V <sub>GS</sub> = 0		1.5	V



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