

# isc N-Channel MOSFET Transistor

### 2SK530

#### **DESCRIPTION**

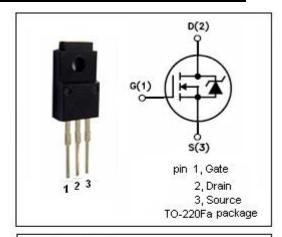
- Drain Current –I<sub>D</sub>=5A@ T<sub>C</sub>=25 °C
- Drain Source Voltage-
  - : V<sub>DSS</sub>=400V(Min)
- · Fast Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

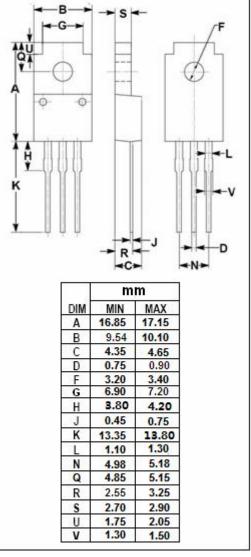


 Designed especially for high voltage, high speed applications, such as off-line switching power supplies, UPS,AC and DC motor controls, relay and solenoid drivers.

#### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	ARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage (V <sub>GS</sub> =0)	400	V
V <sub>GS</sub>	Gate-Source Voltage	±20	٧
I <sub>D</sub>	Drain Current-continuous@ TC=25℃	5	Α
P <sub>tot</sub>	Total Dissipation@TC=25℃	40	W
T <sub>j</sub>	Max. Operating Junction Temperature	150	$^{\circ}$ C
T <sub>stg</sub>	Storage Temperature Range	-55~150	$^{\circ}$







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#### • ELECTRICAL CHARACTERISTICS (T<sub>C</sub>=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0; I <sub>D</sub> = 10mA	400			V
V <sub>GS(TH)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = 10V; I <sub>D</sub> = 1mA	1.5		3.5	V
R <sub>DS(ON)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =3A		1.0	1.4	Ω
V <sub>DS(ON)</sub>	Drain-Source Saturation Voltage	I <sub>F</sub> = 8A; V <sub>GS</sub> =10V		10	18	V
I <sub>GSS</sub>	Gate Source 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> =400V; V <sub>GS</sub> = 0			1	mA



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