

**isc N-Channel MOSFET Transistor**

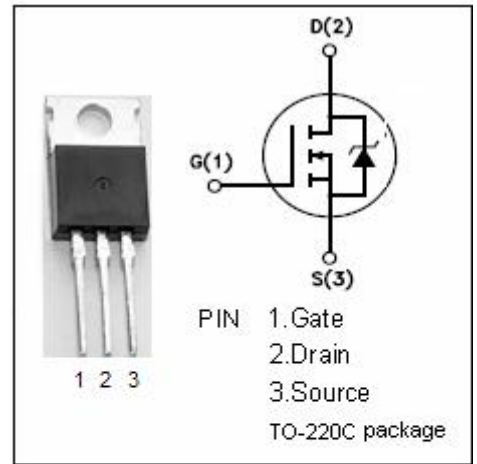
**2SK600**

**DESCRIPTION**

- Drain Current  $-I_D = 25A @ T_C = 25^\circ C$
- Drain Source Voltage-  
:  $V_{DSS} = 60V (Min)$
- Fast Switching Speed

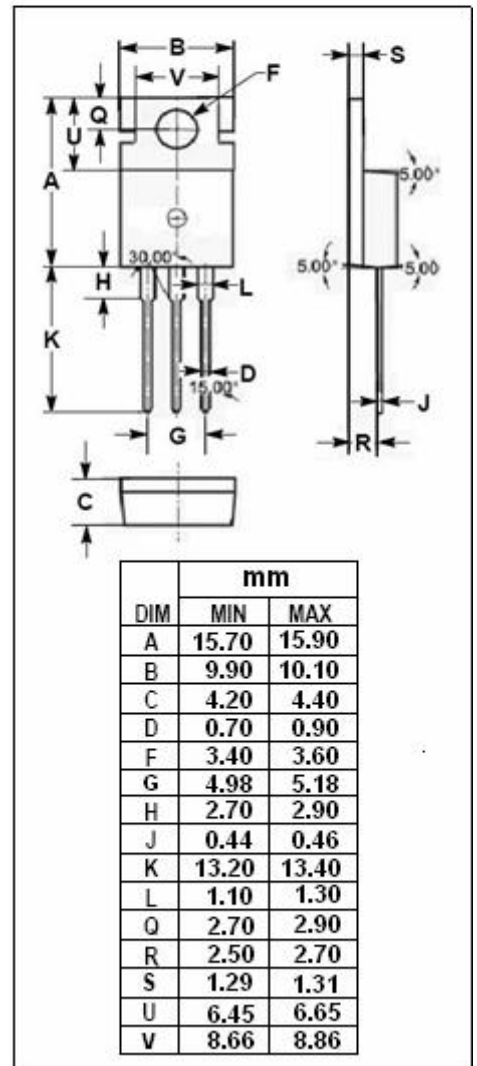
**APPLICATIONS**

- High speed power switching



**ABSOLUTE MAXIMUM RATINGS( $T_a = 25^\circ C$ )**

SYMBOL	ARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage ( $V_{GS} = 0$ )	60	V
$V_{GS}$	Gate-Source Voltage	$\pm 20$	V
$I_D$	Drain Current-continuous@ $TC = 25^\circ C$	25	A
$P_{tot}$	Total Dissipation@ $TC = 25^\circ C$	75	W
$T_j$	Max. Operating Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ C$



## isc N-Channel Mosfet Transistor

2SK600

• 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> = 1mA	60			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> =1mA	2.0		4.0	V
R <sub>DS(on)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> =10V; I <sub>D</sub> = 15A			0.055	Ω
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> =50V; V <sub>GS</sub> = 0			1	uA
V <sub>SD</sub>	Diode Forward Voltage	I <sub>F</sub> =25A; V <sub>GS</sub> =0		1.3	1.7	V
t <sub>r</sub>	Rise time	V <sub>GS</sub> =10V; I <sub>D</sub> =3A; R <sub>L</sub> =50 Ω		50	75	ns
t <sub>on</sub>	Turn-on time			75	115	ns
t <sub>f</sub>	Fall time			80	110	ns
t <sub>off</sub>	Turn-off time			240	330	ns