

isc N-Channel MOSFET Transistor

2SK553

DESCRIPTION

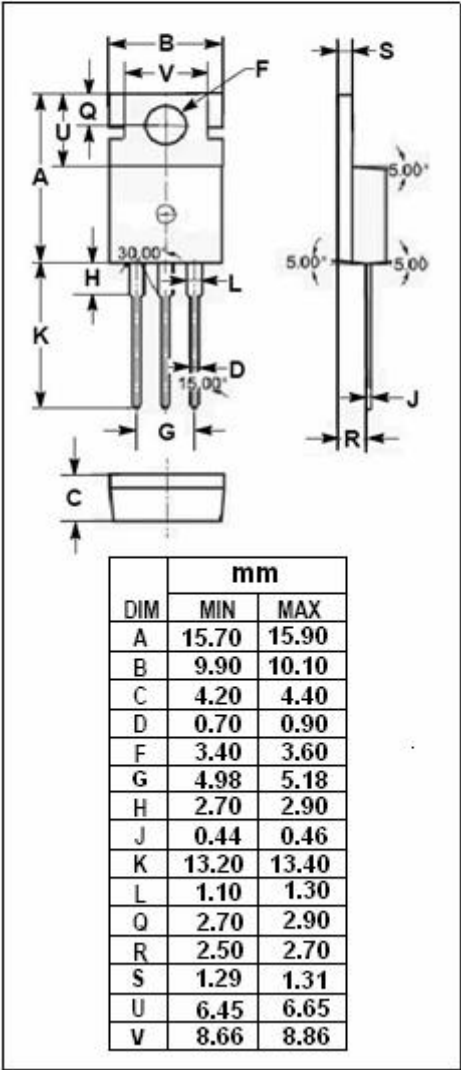
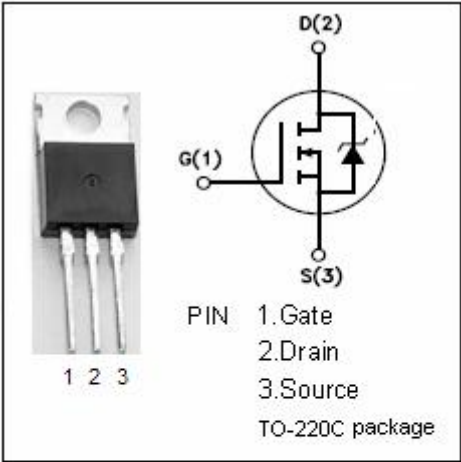
- Drain Current $-I_D=5A@ T_C=25^{\circ}C$
- Drain Source Voltage-
: $V_{DSS}=500V(\text{Min})$
- Fast Switching Speed

APPLICATIONS

- 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($T_a=25^{\circ}C$)

SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	500	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-continuous@ $TC=25^{\circ}C$	5	A
P_{tot}	Total Dissipation@ $TC=25^{\circ}C$	50	W
T_j	Max. Operating Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



isc N-Channel Mosfet Transistor**2SK553****• ELECTRICAL CHARACTERISTICS (T_C=25°C)**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} =0; I _D = 10mA	500			V
V _{GS(TH)}	Gate Threshold Voltage	V _{DS} = 10V; I _D = 1mA	2.0		4.0	V
R _{DS(ON)}	Drain-Source On-stage Resistance	V _{GS} = 10V; I _D =2.5A		1.2	1.5	Ω
V _{SD}	Diode Forward Voltage	I _F = 5A; V _{GS} =0		1.0		V
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±12V; V _{DS} = 0			±10	uA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =400V; V _{GS} = 0			250	uA
t _r	Rise time	V _{GS} =10V; I _D =2.5A; R _L =12 Ω		35		ns
t _{on}	Turn-on time			45		ns
t _f	Fall time			45		ns
t _{off}	Turn-off time			115		ns