

isc N-Channel MOSFET Transistor

2SK725

DESCRIPTION

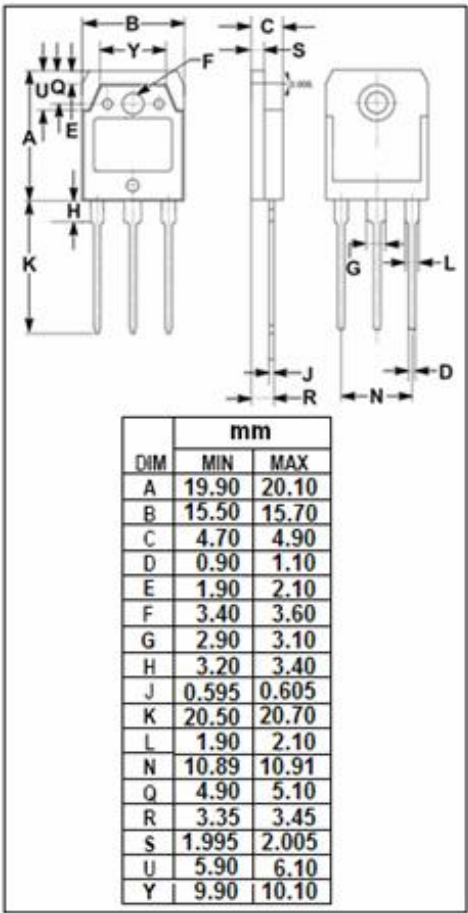
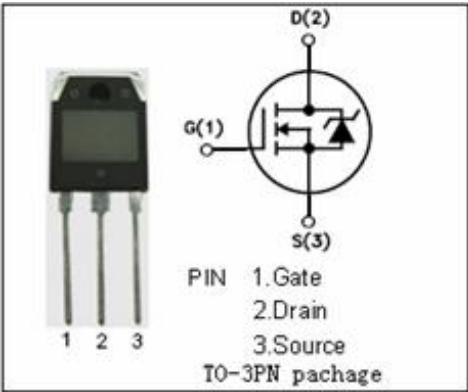
- Drain Current $-I_D=15A@ T_C=25^{\circ}C$
- Drain Source Voltage-
: $V_{DSS}=500V(Min)$

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@ $TC=25^{\circ}C$	15	A
P_{tot}	Total Dissipation@ $TC=25^{\circ}C$	125	W
T_j	Max. Operating Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



isc N-Channel Mosfet Transistor**2SK725****• 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	2.1	3.0	4.0	V
R _{DS(ON)}	Drain-Source On-stage Resistance	V _{GS} = 10V; I _D =8A			0.38	Ω
V _{SD}	Diode Forward Voltage	I _F = 15A; V _{GS} = 0		1.1	1.7	V
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0			±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =500V; V _{GS} = 0			500	uA
ton	Turn-on time	V _{GS} =10V; I _D =2.8A; R _L =50 Ω		130	195	ns
toff	Turn-off time			440	570	ns