

isc N-Channel MOSFET Transistor

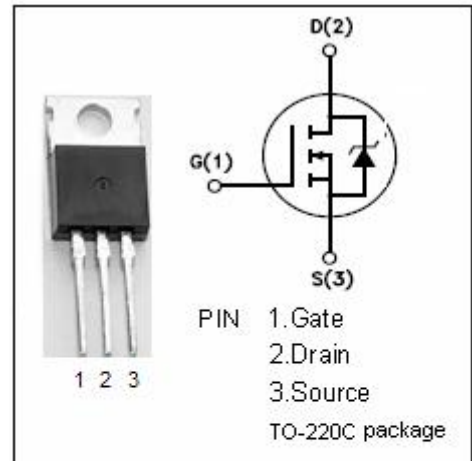
2SK776

DESCRIPTION

- Drain Current  $-I_D=5A @ T_C=25^\circ C$
- Drain Source Voltage-  
:  $V_{DSS}= 450V(\text{Min})$
- Fast Switching Speed

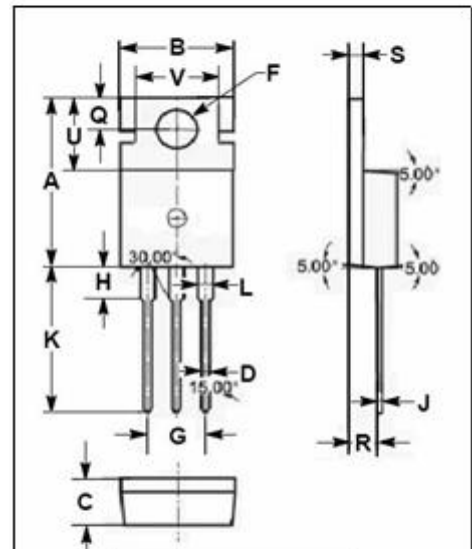
APPLICATIONS

- Designed for high voltage, high speed power switching applications such as switching regulators, converters, solenoid and relay drivers.



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

SYMBOL	ARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage ( $V_{GS}=0$ )	450	V
$V_{GS}$	Gate-Source Voltage	$\pm 20$	V
$I_D$	Drain Current-continuous@ $TC=25^\circ C$	5	A
$P_{tot}$	Total Dissipation@ $TC=25^\circ C$	60	W
$T_j$	Max. Operating Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ C$



DIM	mm	
	MIN	MAX
A	15.70	15.90
B	9.90	10.10
C	4.20	4.40
D	0.70	0.90
F	3.40	3.60
G	4.98	5.18
H	2.70	2.90
J	0.44	0.46
K	13.20	13.40
L	1.10	1.30
Q	2.70	2.90
R	2.50	2.70
S	1.29	1.31
U	6.45	6.65
V	8.66	8.86

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance,Junction to Case	1.0	$^\circ C/W$
$R_{th\ j-a}$	Thermal Resistance,Junction to Ambient	62.5	$^\circ C/W$

## isc N-Channel Mosfet Transistor

2SK776

• 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	450			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> =10 V <sub>GS</sub> ; I <sub>D</sub> =1mA	1.5		4.0	V
R <sub>DS(on)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> =10V; I <sub>D</sub> = 2A		1.2	1.65	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> =450V; V <sub>GS</sub> = 0			1	mA
ton	Turn-on time	V <sub>GS</sub> =10V; I <sub>D</sub> =2A;		40	80	ns
toff	Turn-off time	R <sub>L</sub> =50 Ω		150	300	ns