

isc N-Channel MOSFET Transistor

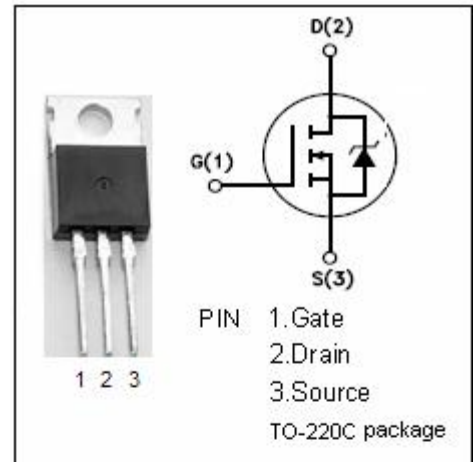
2SK358

DESCRIPTION

- Drain Current $-I_D = 5A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 250V(\text{Min})$
- Fast Switching Speed

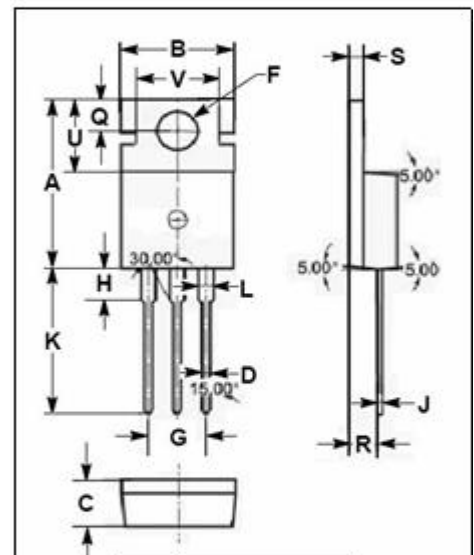
APPLICATIONS

- High speed.
- high voltage Switching applications
DC-DC converter and motor drive applications.



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

SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	250	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-continuous@ $TC=25^\circ C$	5	A
P_{tot}	Total Dissipation@ $TC=25^\circ C$	40	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**2SK358****• 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	250			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = 10V _{GS} ; I _D =1mA	1.5		3.5	V
R _{DS(on)}	Drain-Source On-stage Resistance	V _{GS} =10V; I _D = 3A		0.7	1.0	Ω
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0			±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 250V; V _{GS} = 0			1	mA
tr	Rise time	V _{GS} =10V; I _D =3A; R _L =50 Ω		20	40	ns
ton	Turn-on time			30	60	ns
tf	Fall time			30	60	ns
toff	Turn-off time			80	160	ns