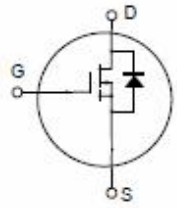
isc N-Channel MOSFET Transistor 2SK2180-01

DESCRIPTION

- Drain Current I_D= 3A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}= 500V(Min)
- Fast Switching Speed



1 2 3

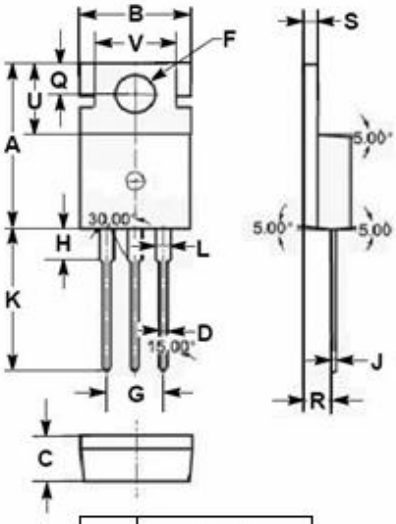
PIN 1.Gate
2.Drain
3.Source
TO-220C package

APPLICATIONS

- General purpose power amplifier

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	500	V
V_{GS}	Gate-Source Voltage	±30	V
I_D	Drain Current-continuous@ TC=25℃	3	A
$I_{D(puls)}$	Pulse Drain Current	9	A
P_{tot}	Total Dissipation@T_C=25℃	40	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



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

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• **ELECTRICAL CHARACTERISTICS (T_C=25℃)**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}= 0; I_D= 1mA	500			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= 10V; I_D=0.3mA	2.5	3.0	3.5	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D= 1.5A		1.8	2.3	Ω
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±30V;V_{DS}= 0			±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}= 500V; V_{GS}= 0			250	μA
Ciss	Input Capacitance	V_{DS}=25V; V_{GS}=0V; f_T=1MHz		400		pF
Crss	Reverse Transfer Capacitance			30		
Coss	Output Capacitance			90		
ton	Turn-on Time	V_{GS}=10V;I_D=1.5A; R_L=100Ω		45	80	ns
toff	Turn-off Time			90	140	