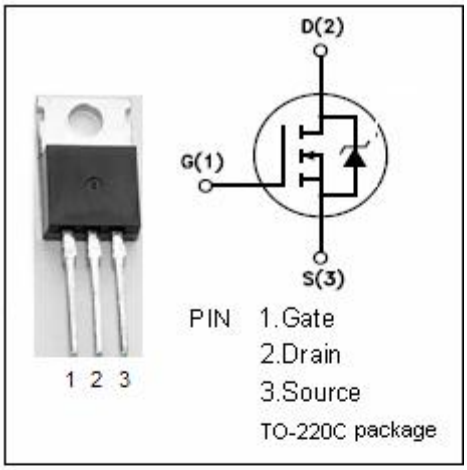
isc N-Channel MOSFET Transistor 9N40



- **DESCRIPTION**
- Drain Current I_D= 9A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}= 400V(Min)
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

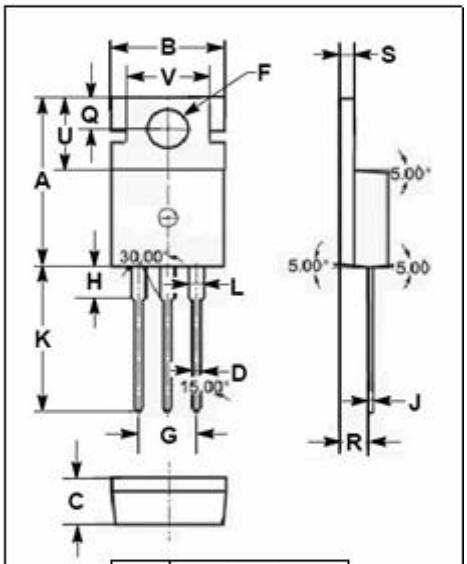
- **APPLICATIONS**
- General purpose power amplifier

- **ABSOLUTE MAXIMUM RATINGS(T_C=25℃)**

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	400	V
V_{GS}	Gate-Source Voltage	±20	V
I_D	Drain Current-continuous@ T_C=25℃	9	A
$I_{D(puls)}$	Pulse Drain Current	36	A
P_{tot}	Total Dissipation@T_C=25℃	100	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

- **THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	1.67	℃/W



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=250μA	400			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D=250μA	2.0		4.0	V
V_{SD}	Diode Forward On-Voltage	I_S=8.5A ;V_{GS}= 0			1.7	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D=4.5A			0.75	Ω
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±20V;V_{DS}= 0			±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}= 400V; V_{GS}= 0			1	μA
C_{iss}	Input Capacitance	V_{DS}=25V; V_{GS}=0V; f_T=1MHz		1340		pF
C_{rss}	Reverse Transfer Capacitance			490		
C_{oss}	Output Capacitance			160		
t_r	Rise Time	V_{GS}=10V; I_D=8.5A; V_{DD}=200V; R_L=25Ω		60		ns
$t_{d(on)}$	Turn-on Delay Time			22		
t_f	Fall Time			140		
$t_{d(off)}$	Turn-off Delay Time			32		

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