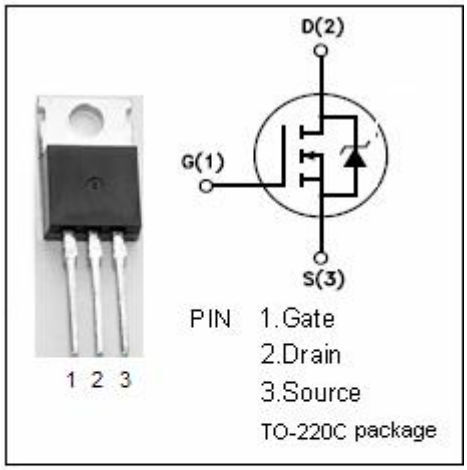
isc N-Channel MOSFET Transistor 6N45

DESCRIPTION

- Drain Current I_D= 6A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}= 450V(Min)
- Fast Switching Speed

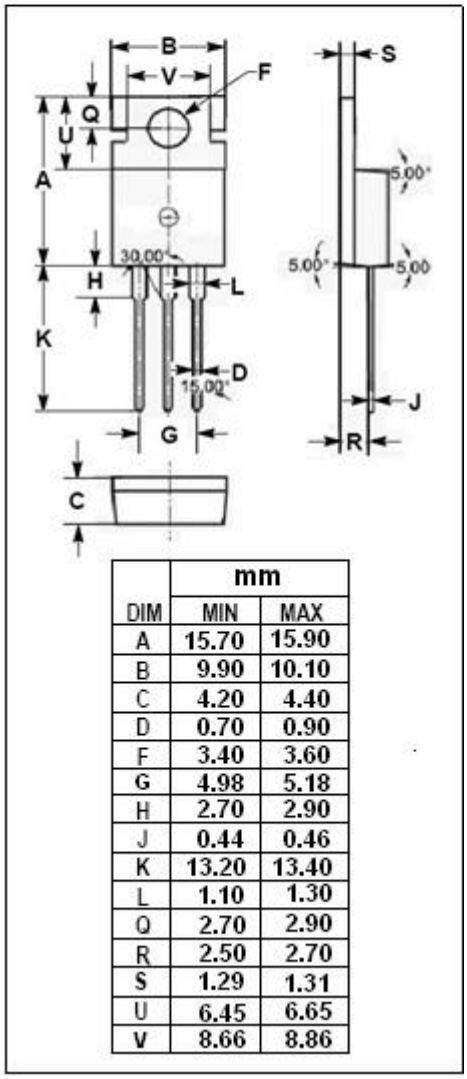


APPLICATIONS

- General purpose power amplifier

ABSOLUTE MAXIMUM RATINGS(T_C=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	450	V
V_{GS}	Gate-Source Voltage	±30	V
I_D	Drain Current-continuous@ T_C=25℃	6	A
$I_{D(puls)}$	Pulse Drain Current	15	A
P_{tot}	Total Dissipation@T_C=25℃	100	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

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	1.67	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance, Junction to Ambient	62.5	℃/W

isc N-Channel MOSFET Transistor 6N45

• 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	450			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D=1mA	2.0		4.0	V
V_{SD}	Diode Forward On-Voltage	I_S=3A ;V_{GS}= 0			1.4	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D=3A			1.25	Ω
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±30V;V_{DS}= 0			±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}= 360V; V_{GS}= 0			10	μA
C_{iss}	Input Capacitance	V_{DS}=25V; V_{GS}=0V; f_T=1MHz			1500	pF
C_{rss}	Reverse Transfer Capacitance				200	
C_{oss}	Output Capacitance				250	
t_r	Rise Time	V_{GS}=10V; I_D=3A; V_{DD}=250V; R_L=50Ω		40		ns
$t_{d(on)}$	Turn-on Delay Time			15		
t_f	Fall Time			60		
$t_{d(off)}$	Turn-off Delay Time			190		