

isc N-Channel MOSFET Transistor

IRFZ48N

FEATURES

- Drain Current $-I_D = 64A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 55V (Min)$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 0.014 \Omega (Max)$
- Fast Switching

DESCRIPTION

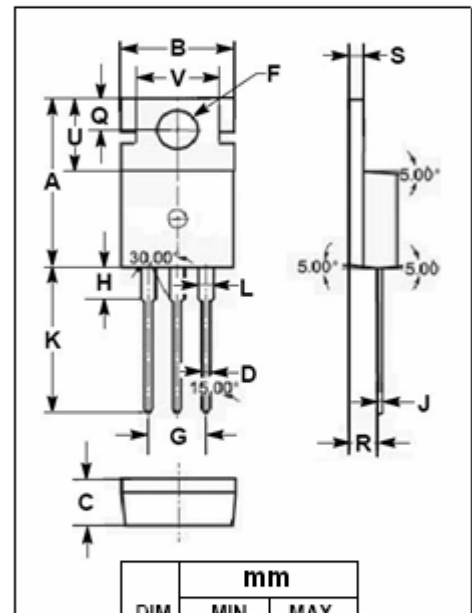
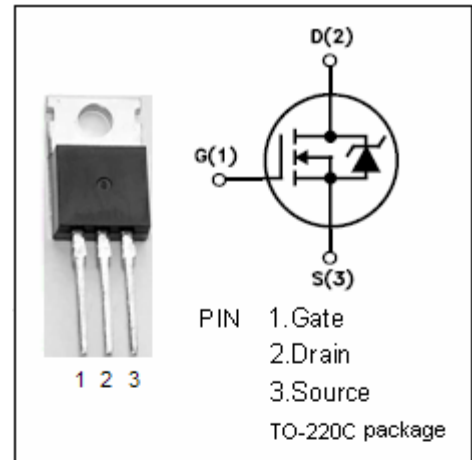
- Designed for use in switch mode power supplies and general purpose applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	55	V
V_{GS}	Gate-Source Voltage-Continuous	± 20	V
I_D	Drain Current-Continuous	64	A
I_{DM}	Drain Current-Single Pluse	210	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	130	W
T_J	Max. Operating Junction Temperature	175	$^\circ C$
T_{stg}	Storage Temperature	-55~175	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	1.15	$^\circ C/W$
$R_{th j-a}$	Thermal Resistance, Junction to Ambient	62	$^\circ C/W$



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

isc N-Channel MOSFET Transistor**IRFZ48N****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}= 0; I_D= 0.25\text{mA}$	55		V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}= V_{GS}; I_D= 0.25\text{mA}$	2	4	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}= 10\text{V}; I_D= 32\text{A}$		0.014	Ω
I_{GSS}	Gate-Body Leakage Current	$V_{GS}= \pm 20\text{V}; V_{DS}= 0$		± 100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}= 55\text{V}; V_{GS}= 0$ $V_{DS}= 55\text{V}; V_{GS}= 0; T_j= 150^{\circ}\text{C}$		25 250	μA
V_{SD}	Forward On-Voltage	$I_S= 32\text{A}; V_{GS}= 0$		1.3	V