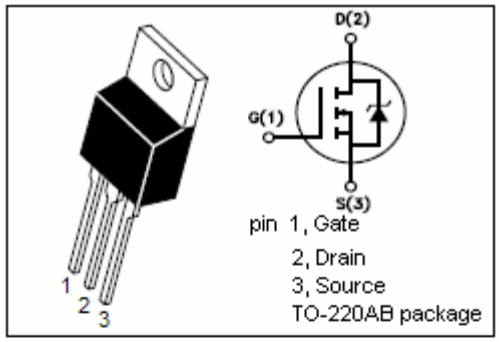
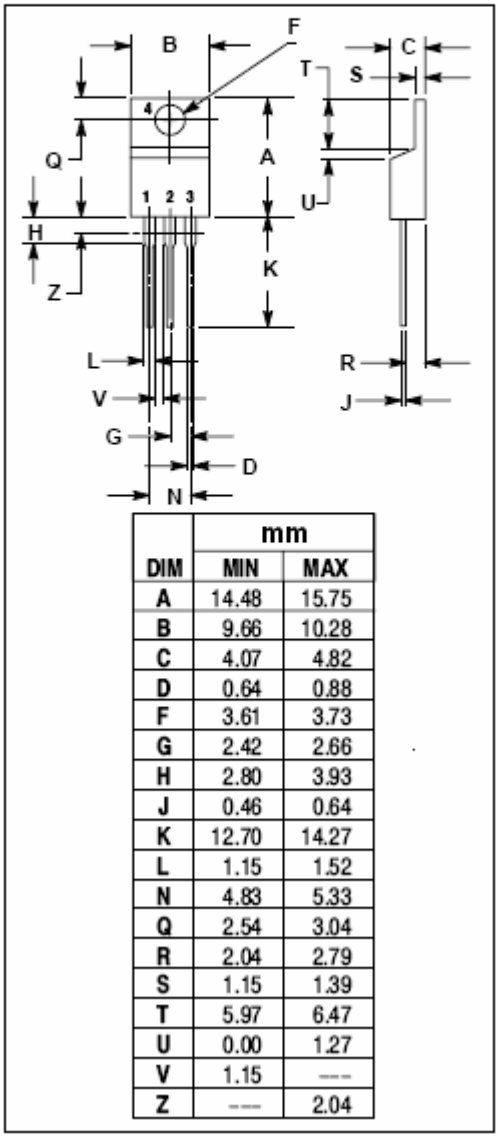
isc N-Channel Mosfet Transistor IRF625

- **FEATURES**
- $R_{DS(on)}$ =1.5Ω
- 3.3A and 250V
- single pulse avalanche energy rated
- SOA is Power- Dissipation Limited
- Linear Transfer Characteristics
- High Input Impedance



- **DESCRITION**
- Designed for high speed applications, such as switching power supplies , AC and DC motor controls ,relay and solenoid drivers and other pulse.



DIM	mm MIN	MAX
A	14.48	15.75
B	9.66	10.28
C	4.07	4.82
D	0.64	0.88
F	3.61	3.73
G	2.42	2.66
H	2.80	3.93
J	0.46	0.64
K	12.70	14.27
L	1.15	1.52
N	4.83	5.33
Q	2.54	3.04
R	2.04	2.79
S	1.15	1.39
T	5.97	6.47
U	0.00	1.27
V	1.15	---
Z	---	2.04

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	250	V
V_{GS}	Gate-Source Voltage-Continuous	±20	V
I_D	Drain Current-Continuous	3.3	A
I_{DM}	Drain Current-Single Plused	13	A
P_D	Total Dissipation @T_C=25℃	40	W
T_j	Max. Operating Junction Temperature	-55~150	℃
T_{stg}	Storage Temperature	-55~150	℃

- **THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	3.12	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	80	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}= 0; I_D= 0.25mA	250			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D= 0.25mA	2		4	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D= 1.4A			1.5	Ω
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±20V;V_{DS}= 0			±500	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}= 250V; V_{GS}=0			250	uA
V_{SD}	Forward On-Voltage	I_S= 3.8A; V_{GS}=0			1.8	V
Ciss	Input Capacitance	V_{DS}=25V,V_{GS}=0V, F=1.0MHz		340		pF
Coss	Output Capacitance			110		pF
Crss	Reverse Transfer Capacitance			32		pF

• SWITCHING CHARACTERISTICS (T_C=25℃)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
Td(on)	Turn-on Delay Time	V_{DD}=125V,I_D=3.8A R_G=18Ω		11	17	ns
Tr	Rise Time			24	36	ns
Td(off)	Turn-off Delay Time			21	32	ns
Tf	Fall Time			13	20	ns