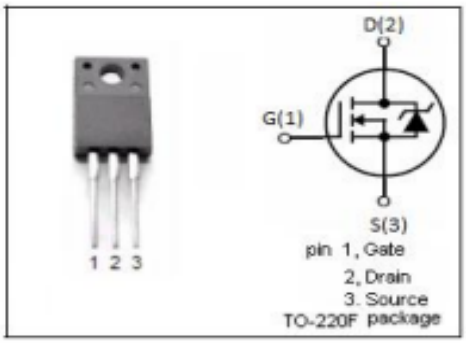
N-Channel Mosfet Transistor FIR4N65F

• FEATURES

- Drain Current –I_D= 4A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}= 650V(Min)
- Static Drain-Source On-Resistance
  : $R_{DS(on)}$ = 3.0 Ω (Max)
- Avalanche Energy Specified
- Fast Switching
- Simple Drive Requirements



• DESCRITION

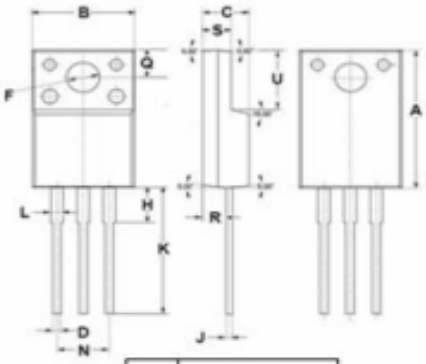
- Designed for high efficiency switch mode power supply.

• ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	650	V
V_{GS}	Gate-Source Voltage-Continuous	±30	V
I_D	Drain Current-Continuous	4	A
I_{DM}	Drain Current-Single Plused	16	A
P_D	Total Dissipation @T_C=25℃	106	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.18	℃/W
$R_{th\ j-a}$	Thermal Resistance, Junction to Ambient	62.5	℃/W



DIM	mm MIN	mm MAX
A	14.95	15.05
B	10.00	10.10
C	4.40	4.60
D	0.75	0.90
F	3.10	3.30
H	3.70	3.90
J	0.50	0.70
K	13.4	13.6
L	1.10	1.30
N	5.00	5.20
Q	2.70	2.90
R	2.20	2.40
S	2.65	2.90
U	6.40	6.60

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}= 0; I_D= 0.25mA	650		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= 2A		3.0	Ω
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±30V;V_{DS}= 0		±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}= 650V; V_{GS}= 0		10	μA
V_{SD}	Forward On-Voltage	I_S= 4A; V_{GS}= 0		1.4	V