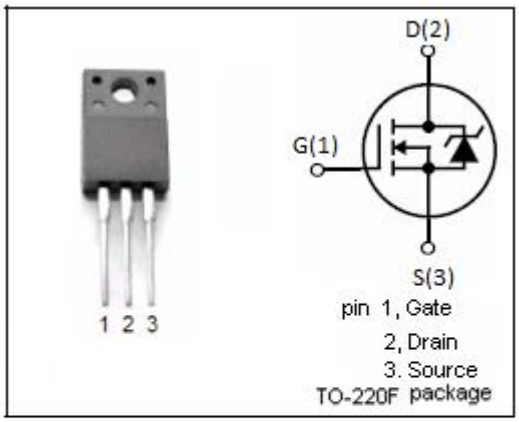
isc N-Channel MOSFET Transistor 7N65

• FEATURES

- Drain Current I_D= 7A@ T_C=25℃
- Drain Source Voltage
  : V_{DSS}= 650V(Min)
- Static Drain-Source On-Resistance
  : RDS(on) = 1.35Ω(Max) @VGS = 10 V
- Avalanche Energy Specified
- Fast Switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



• APPLICATIONS

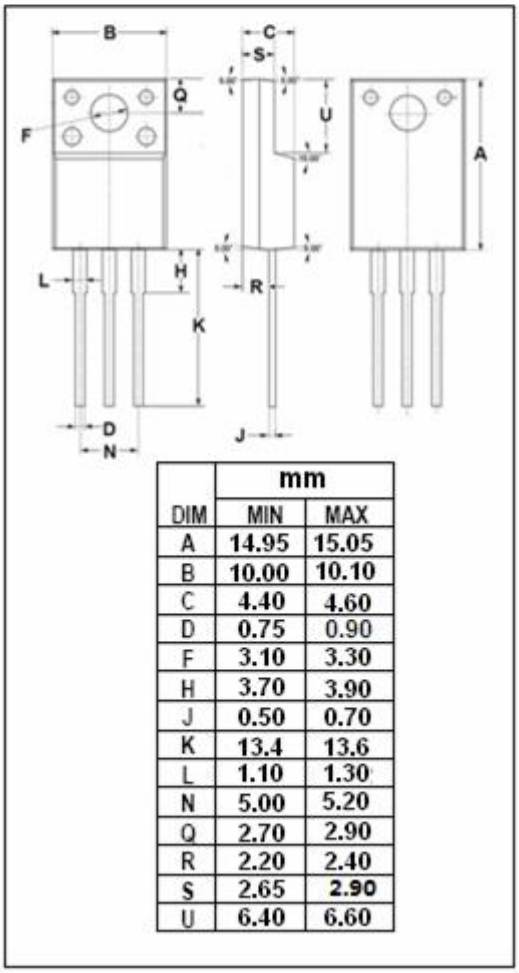
- High speed switching applications in power supplies
- PWM motor controls
- High efficient DC to DC converters and bridge circuits.

• 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	7	A
I_{DM}	Drain Current-Single Plused	28	A
P_D	Total Dissipation @T_C=25℃	142	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	0.88	℃/W
$R_{th\ j\text{-}a}$	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= 3.5A			1.35	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			1	μA
V_{SD}	Forward On-Voltage	I_S= 7A; V_{GS}= 0			1.4	V
Gfs	Forward Transconductance	V_{DS}= 40V； I_D= 3.5A		8		S

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