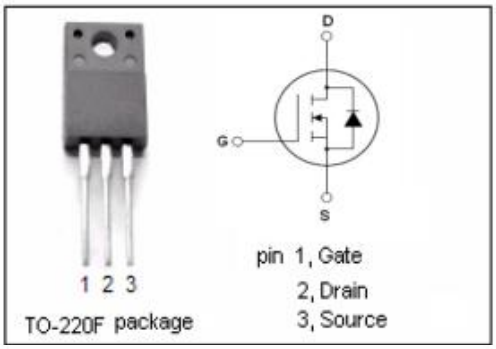
iscN-Channel MOSFET Transistor TK9A65W, ITK9A65W



• FEATURES

- Low drain-source on-resistance: R_{DS}(ON) = 0.43Ω (typ.)
- Enhancement mode: Vth = 2.5 to 3.5V (V_{DS} = 10 V, I_D=0.35mA)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• DESCRIPTION

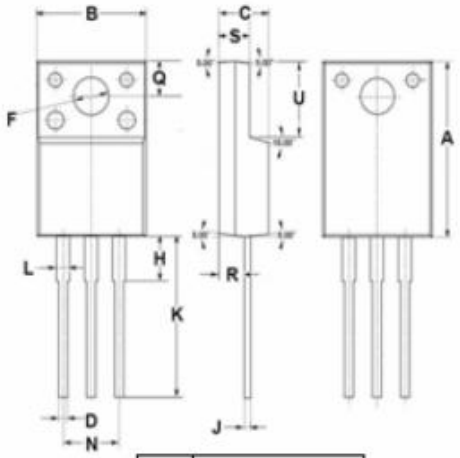
- Switching Voltage Regulators

• ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	650	V
V_{GS}	Gate-Source Voltage	±30	V
I_D	Drain Current-Continuous	9.3	A
I_{DM}	Drain Current-Single Pulsed	37.2	A
P_D	Total Dissipation @T_C=25℃	30	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	4.17	℃/W
Rth(ch-a)	Channel-to-ambient thermal resistance	62.5	℃/W



DIM	mm MIN	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	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	V_{GS}=0V; I_D= 10mA	650			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= 10V; I_D=0.35mA	2.5		3.5	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D=4.6A		430	500	mΩ
I_{GSS}	Gate-Source Leakage Current	V_{GS}= ±30V;V_{DS}= 0V			±1	μA
I_{DSS}	Drain-Source Leakage Current	V_{DS}= 650V; V_{GS}= 0V			10	μA
V_{SDF}	Diode forward voltage	I_{DR} =9.3A, V_{GS} = 0 V			1.7	V

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