

isc N-Channel MOSFET Transistor

TK8P65W

• FEATURES

- Drain Current $I_D = 7.8A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 650V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 0.67 \Omega (\text{Max})$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

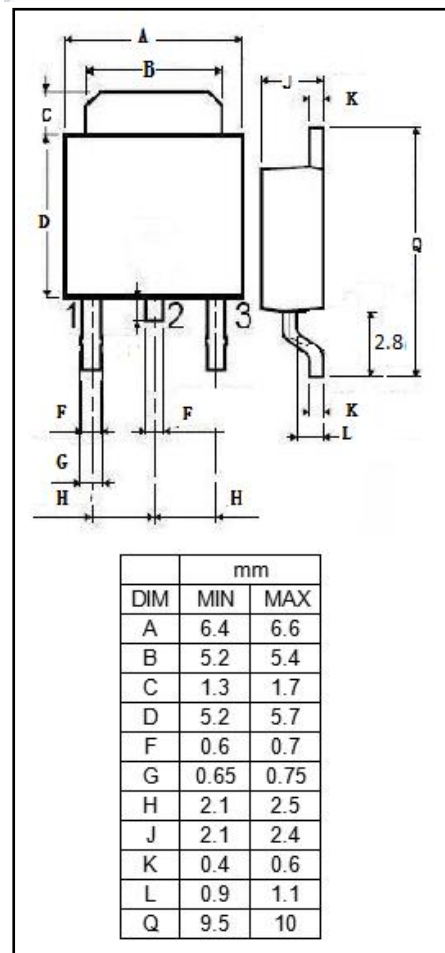
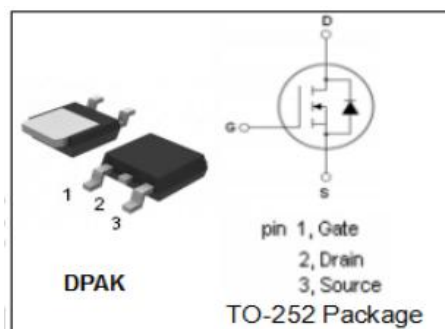
- Switching power supplies, converters, AC and DC motor controls

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	650	V
V_{GS}	Gate-Source Voltage-Continuous	± 30	V
I_D	Drain Current-Continuous	7.8	A
I_{DM}	Drain Current-Single Pulsed	31.2	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	80	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	1.56	$^\circ C/W$



isc N-Channel MOSFET Transistor**TK8P65W****• ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 10mA	650			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = 0.3A	2.5		3.5	V
V _{SD}	Diode Forward On-voltage	I _S = 7.8A; V _{GS} = 0			1.7	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =3.9A			0.67	Ω
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ± 30V; V _{DS} = 0			± 1	μA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =650V; V _{GS} = 0			10	μA

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