

Isc N-Channel MOSFET Transistor

TK65A10N1, ITK65A10N1

• FEATURES

Low drain-source on-resistance:
RDs(ON) = 4.8mΩ (Vgs = 10 V)

Enhancement mode:
Vth = 2.0 to 4.0V (VDS = 10 V, ID=1.0mA)

- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRITION

· Switching Voltage Regulators

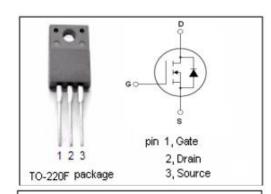


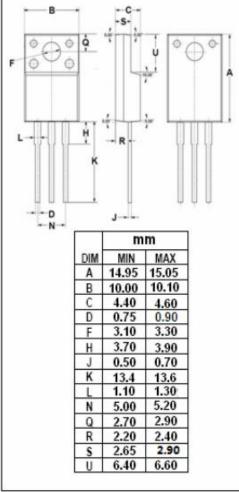
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage	100	V
V _{GS}	Gate-Source Voltage	±20	V
I _D	Drain Current-Continuous	65	А
I _{DM}	Drain Current-Single Pulsed	296	А
P_D	Total Dissipation @T _C =25℃	45	W
Tj	Max. Operating Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	2.77	°C/W
Rth(ch-a)	Channel-to-ambient thermal resistance		°C/W







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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 10mA	100			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = 10V; I _D =1.0mA	2.0		4.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D =32.5A			4.8	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±20V;V _{DS} = 0V			±0.1	μА
I _{DSS}	Drain-Source Leakage Current	V _{DS} = 100V; V _{GS} = 0V			10	μА
V _{SDF}	Diode forward voltage	I _{DR} =65A, V _{GS} = 0 V			1.2	V

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