

iscN-Channel MOSFET Transistor

TK5A50D, ITK5A50D

• FEATURES

• Low drain-source on-resistance:

RDS(on) = 1.3Ω (typ.)

• Enhancement mode:

Vth = 2.4 to 4.4V (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

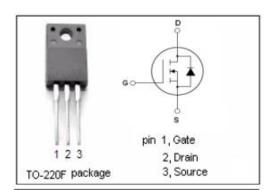


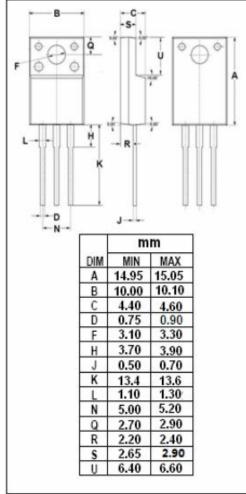
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage	500	V
V _{GS}	Gate-Source Voltage	±30	V
I _D	Drain Current-Continuous	5	А
I _{DM}	Drain Current-Single Pulsed	20	А
P_D	Total Dissipation @T _C =25℃	35	W
Tj	Max. Operating Junction Temperature	150	${\mathbb C}$
T _{stg}	Storage Temperature	-55~150	${\mathbb C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	3.57	°C/W
Rth(ch-a)	-a) Channel-to-ambient thermal resistance		°C/W







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ELECTRICAL CHARACTERISTICS

 T_{C} =25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 10mA	500			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = 10V; I _D =1.0mA	2.4		4.4	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D =2.5A		1300	1500	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±30V;V _{DS} = 0V			±1	μ A
I _{DSS}	Drain-Source Leakage Current	V _{DS} =500V; V _{GS} = 0V			10	μ А
V _{SDF}	Diode forward voltage	I _{DR} =5A, V _{GS} = 0 V			1.7	V

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