

INCHANGE SEMICONDUCTOR

iscN-Channel MOSFET Transistor

TK6A60W, ITK6A60W

FEATURES

- Low drain-source on-resistance: $R_{DS}(ON) = 0.68\Omega$ (typ.)
- Easy to control Gate switching
- Enhancement mode: Vth = 2.7 to 3.7V (VDs = 10 V, ID=0.31mA)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRITION

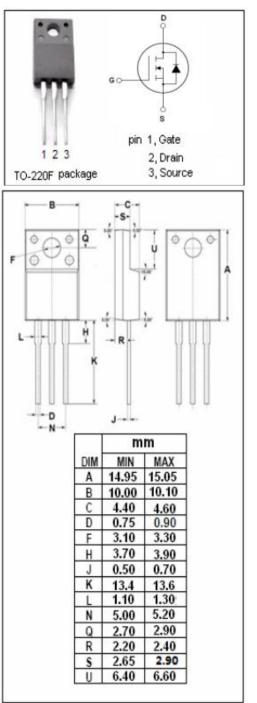
Switching Voltage Regulators

• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE		UNIT				
V _{DSS}	Drain-Source Voltage		600	V				
V_{GS}	Gate-Source Voltage	±30		V				
ID	Drain Current-Continuous	6.2		А				
I _{DM}	Drain Current-Single Pulsed	24.8		А				
PD	Total Dissipation @Tc=25°C	30		W				
Tj	Max. Operating Junction Temperature	150		°C				
T _{stg}	Storage Temperature	-55~150		°C				
THERMAL CHARACTERISTICS								
SYMBOL	OL PARAMETER MAX		МАХ	UNIT				

Channel-to-case thermal resistance

Channel-to-ambient thermal resistance



Rth(ch-c)

Rth(ch-a)

°C/W

°C/W

4.17

62.5

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ELECTRICAL CHARACTERISTICS

 $T_{\text{C}}\text{=}25^{\circ}\!\!\!\!\mathrm{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	МАХ	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 10mA	600			v
V _{GS} (th)	Gate Threshold Voltage	V _{DS} = 10V; I _D =0.31mA	2.7		3.7	v
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =3.1A		680	750	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±30V;V _{DS} =0V			±1	μA
I _{DSS}	Drain-Source Leakage Current	V _{DS} = 600V; V _{GS} = 0V			10	μA
V _{SDF}	Diode forward voltage	I _{DR} =6.2A, V _{GS} = 0 V			1.7	v

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