

iscN-Channel MOSFET Transistor

IRLIZ44G

• FEATURES

- Low drain-source on-resistance:
 $R_{DS(ON)} \leq 28m\Omega$ @ $V_{GS}=5V$
- Enhancement mode:
 $V_{th} = 1.0$ to $2.0V$ ($V_{DS} = 10V$, $I_D=0.25mA$)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• DESCRIPTION

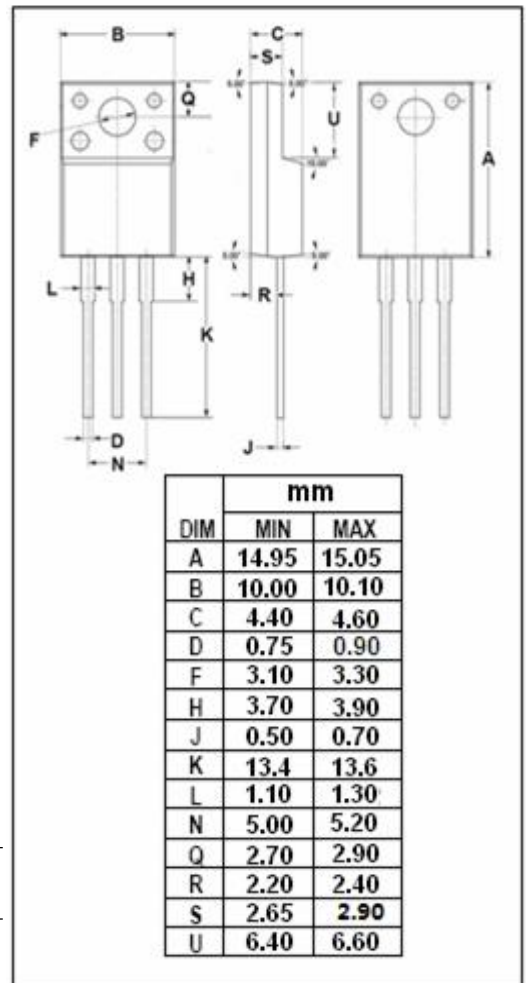
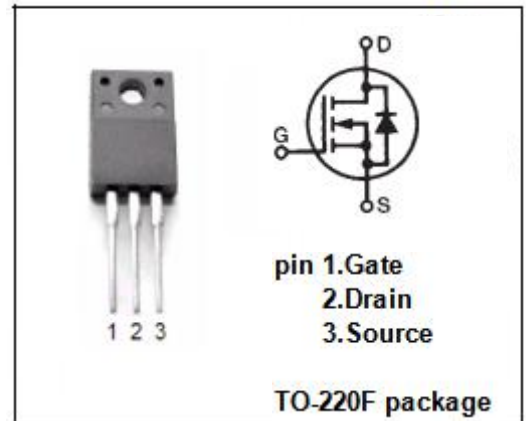
- Switching Voltage Regulators

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage	60	V
V_{GS}	Gate-Source Voltage	± 10	V
I_D	Drain Current-Continuous	30	A
I_{DM}	Drain Current-Single Pulsed	120	A
P_D	Total Dissipation @ $T_c=25^\circ C$	48	W
T_j	Max. Operating Junction Temperature	-55~175	$^\circ C$
T_{stg}	Storage Temperature	-55~175	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	3.1	$^\circ C/W$



iscN-Channel MOSFET Transistor**IRLIZ44G****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 0.25mA	60			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = 10V; I _D =0.25mA	1.0		2.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =5V; I _D =18A V _{GS} =4V; I _D =15A			28 39	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ± 10V; V _{DS} = 0V			± 100	nA
I _{DSS}	Drain-Source Leakage Current	V _{DS} =60V; V _{GS} = 0V V _{DS} =48V; V _{GS} = 0V; T _J =125°C			25 250	uA
V _{SDF}	Diode forward voltage	I _{DR} =30A, V _{GS} = 0 V			2.5	V

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