

isc N-Channel MOSFET Transistor

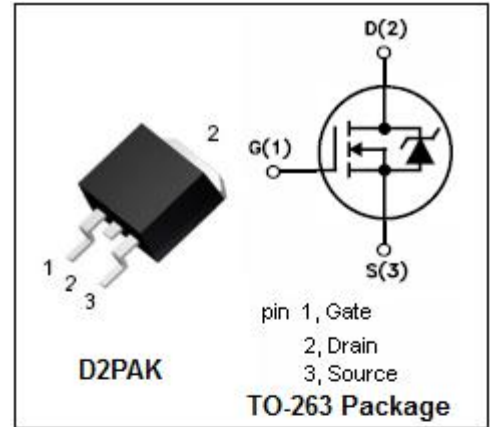
IRFS3307ZTRL

DESCRIPTION

- Drain Current $I_D=120A@ T_C=25^{\circ}C$
- Drain Source Voltage-
: $V_{DSS}= 75V(\text{Min})$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

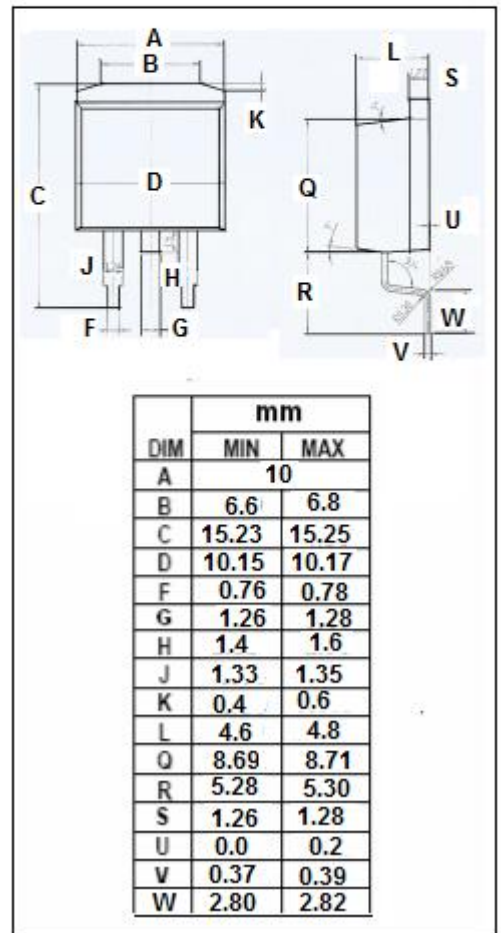
- Power switching application
- Hard switched and high frequency circuits
- Uninterruptible power supply

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	75	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-continuous@ $T_C=25^{\circ}C$	120	A
P_{tot}	Total Dissipation@ $T_C=25^{\circ}C$	230	W
T_j	Max. Operating Junction Temperature	-55~175	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~175	$^{\circ}C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	0.65	$^{\circ}C/W$



isc N-Channel Mosfet Transistor**IRFS3307ZTRL****• ELECTRICAL CHARACTERISTICS (T_c=25°C)**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 0.25mA	75			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D =0.25mA	2		4	V
R _{DS(on)}	Drain-Source On-stage Resistance	V _{GS} =10V; I _D = 30A			5.5	mΩ
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0			± 100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =75V; V _{GS} = 0			1	uA
V _{SD}	Forward On-Voltage	I _S = 20A; V _{GS} =0			1.2	V

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