

isc N-Channel MOSFET Transistor

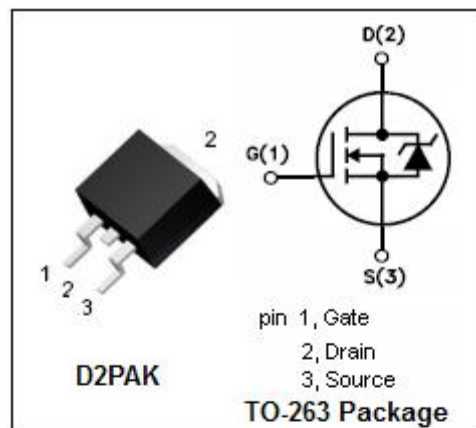
IRF3205STRLPBF

• DESCRIPTION

- Drain Current $I_D=110A@ T_C=25^{\circ}C$
- Drain Source Voltage
: $V_{DSS}= 55V(\text{Min})$
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

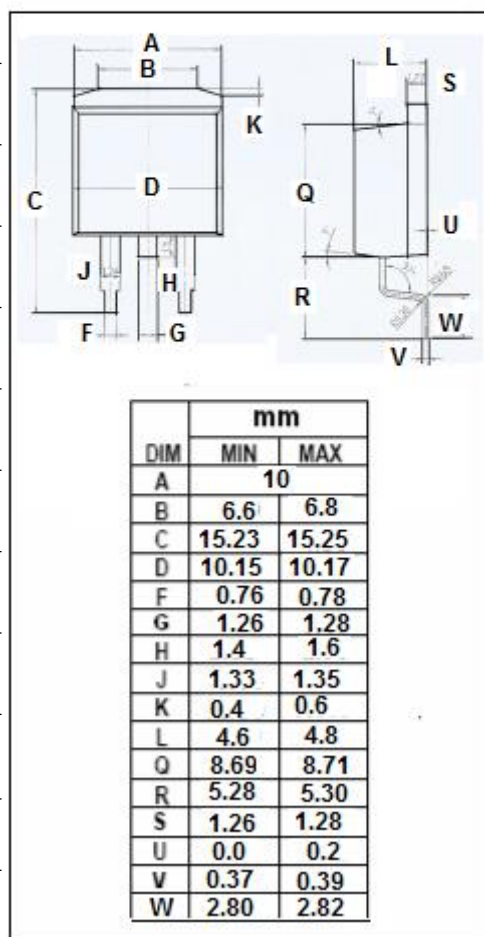
- Designed for high current, high speed switching, switch mode power supplies.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	55	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-continuous@ $T_C=25^{\circ}C$	110	A
I_{DM}	Pulse Drain Current	390	A
P_{tot}	Total Dissipation@ $T_C=25^{\circ}C$	200	W
T_j	Max. Operating Junction Temperature	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	0.75	$^{\circ}C/W$



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• ELECTRICAL CHARACTERISTICS (T_c=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 250μA	55			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D =250μA	2.0		4.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =62A			8	mΩ
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±20V; V _{DS} = 0			± 100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =55V; V _{GS} = 0			25	μA
V _{SD}	Diode Forward On-Voltage	I _S =62A; V _{GS} = 0			1.3	V

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