

isc N-Channel MOSFET Transistor
IRF150MPBF
DESCRIPTION

- Drain Current $-I_D=40A@ T_C=25^\circ C$
- Drain Source Voltage-
: $V_{DSS}= 100V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 0.055 \Omega (\text{Max})$
- High Power, High Speed Applications
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

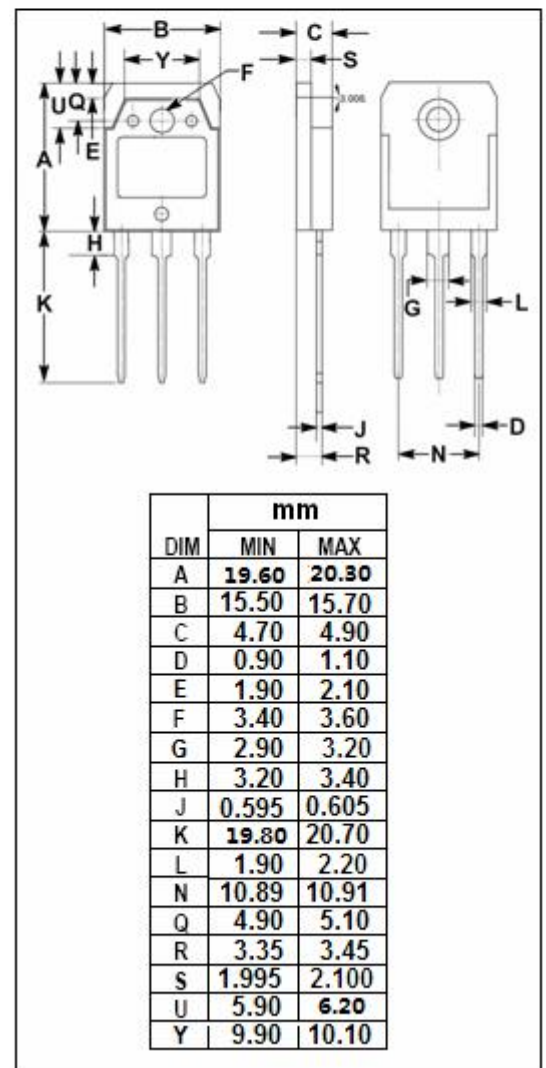
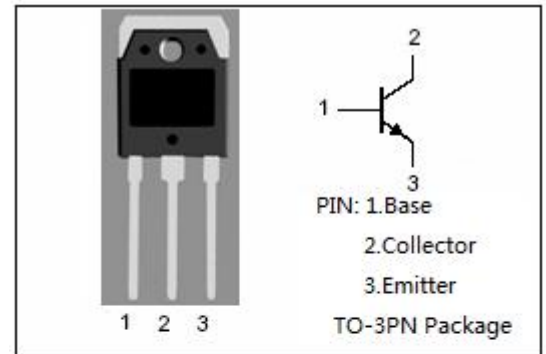
- Switching power supplies
- Motor controls
- High energy pulse circuits.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	100	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-continuous@ $T_C=25^\circ C$	40	A
P_{tot}	Total Dissipation@ $T_C=25^\circ C$	150	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	0.83	$^\circ C/W$



isc N-Channel Mosfet Transistor**IRF150MPBF****• 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	100			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-stage Resistance	V _{GS} =10V; I _D =24A			0.055	Ω
I _{GSS}	Gate Source Leakage Current	V _{GS} =±20V; V _{DS} =0			±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =100V; V _{GS} =0			250	uA
V _{SD}	Diode Forward Voltage	I _S =38A; V _{GS} =0			1.8	V

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