

isc N-Channel MOSFET Transistor

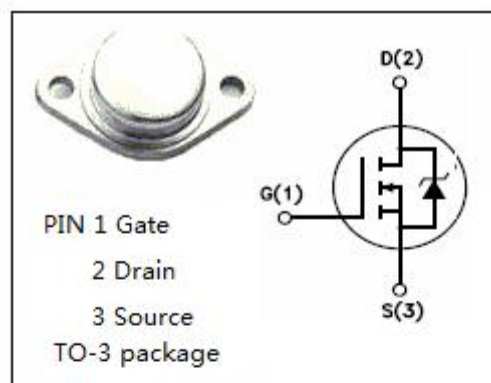
IRF460

DESCRIPTION

- Repetitive Avalanche Ratings
- Dynamic dv/dt Rating
- Hermetically Sealed
- Simple Drive Requirements
- Ease of Paralleling

APPLICATIONS

- Designed for applications such as switching power Supplies ,motor controls ,inverters ,choppers ,audio amplifiers and high energy pulse circuits.

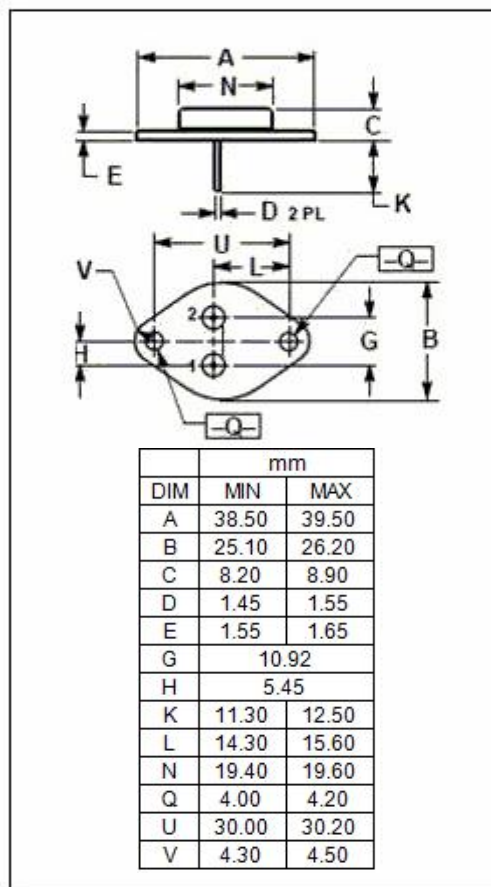


ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	ARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage ($V_{GS}=0$)	500	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-continuous@ $TC=25^{\circ}\text{C}$	21	A
P_{tot}	Total Dissipation@ $TC=25^{\circ}\text{C}$	300	W
T_j	Max. Operating Junction Temperature	-55~150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance,Junction to Case	0.42	$^{\circ}\text{C/W}$
$R_{th\ j-A}$	Thermal Resistance,Junction to Ambient	30	$^{\circ}\text{C/W}$



isc N-Channel Mosfet Transistor**IRF460****• 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	500			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 = 14A			0.27	Ω
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0			±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 500V; V _{GS} = 0			250	uA
V _{SD}	Diode Forward Voltage	I _F = 21A; V _{GS} = 0			1.8	V
C _{iss}	Input Capacitance	V _{DS} =250V, V _{GS} =10V, F=1.0MHz		4100		pF
C _{oss}	Output Capacitance			480		pF
C _{rss}	Reverse Transfer Capacitance			84		pF

• SWITCHING CHARACTERISTICS (T_c=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
T _{d(on)}	Turn-on Delay Time	V _{DD} =250V, I _D =21A R _G =4.3Ω		23	35	ns
T _r	Rise Time			81	120	ns
T _{d(off)}	Turn-off Delay Time			85	130	ns
T _f	Fall Time			65	98	ns

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