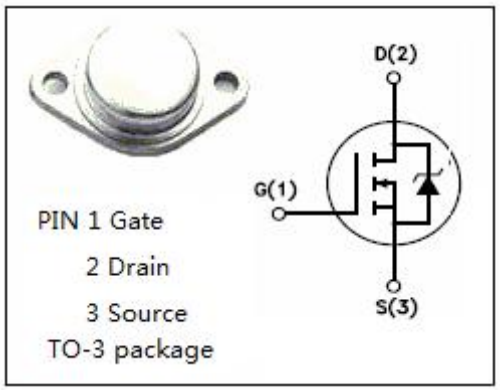
isc N-Channel MOSFET Transistor IRF460

DESCRIPTION

- Repetitive Avalanche Ratings
- Dynamic dv/dt Rating
- Hermetically Sealed
- Simple Drive Requirements
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

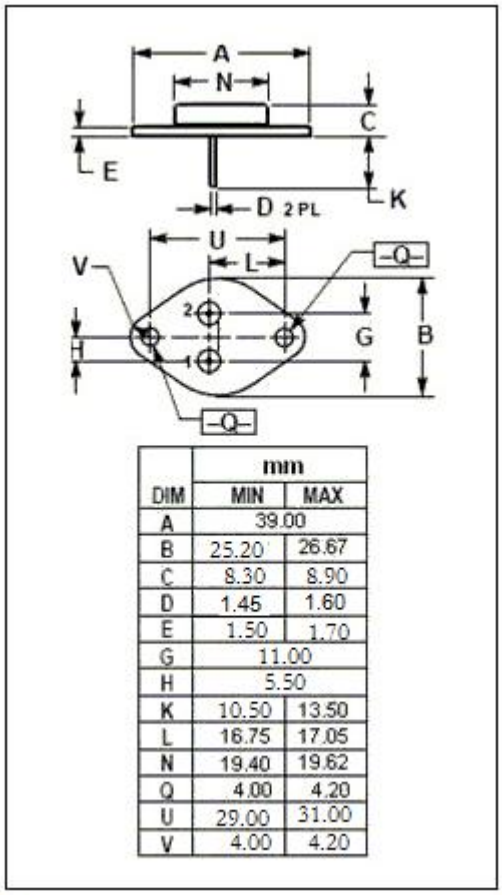
- Designed for applications such as switching power Supplies ,motor controls ,inverters ,choppers ,audio amplifiers and high energy pulse circuits.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

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

THERMAL CHARACTERISTICS

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



DIM	mm MIN	MAX
A	39.00	
B	25.20	26.67
C	8.30	8.90
D	1.45	1.60
E	1.50	1.70
G	11.00	
H	5.50	
K	10.50	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	29.00	31.00
V	4.00	4.20

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ELECTRICAL CHARACTERISTICS (T_C=25℃)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}=0; I_D= 1mA	500			V
$V_{GS(TH)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D= 0.25mA	2		4	V
$R_{DS(ON)-1}$	Drain-Source On-stage Resistance	V_{GS}= 10V; I_D= 14A			0.27	Ω
$R_{DS(ON)-2}$	Drain-Source On-stage Resistance	V_{GS}= 10V; I_D= 21A			0.31	Ω
I_{GSS}	Gate Source Leakage Current	V_{GS}= ±20V; V_{DS}= 0			±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}= 400V; V_{GS}= 0			25	uA
V_{SD}	Diode Forward Voltage	I_F= 21A; V_{GS}= 0			1.8	V