

isc N-Channel MOSFET Transistor

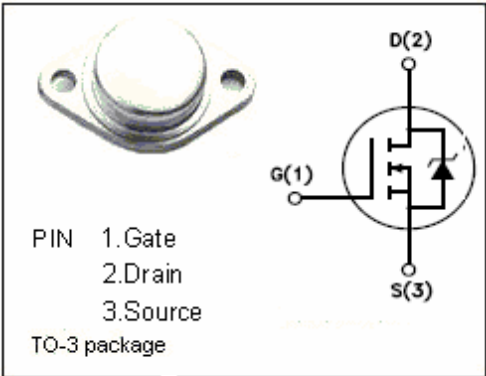
IRF432

DESCRIPTION

- silicon Gate for fast switching at elevate
- rugged
- low drive requirements
- ease of paralleling

APPLICATIONS

- high speed applications such as
Switching power supplies,AC and DCmotor controls
relay and solenoid driver.

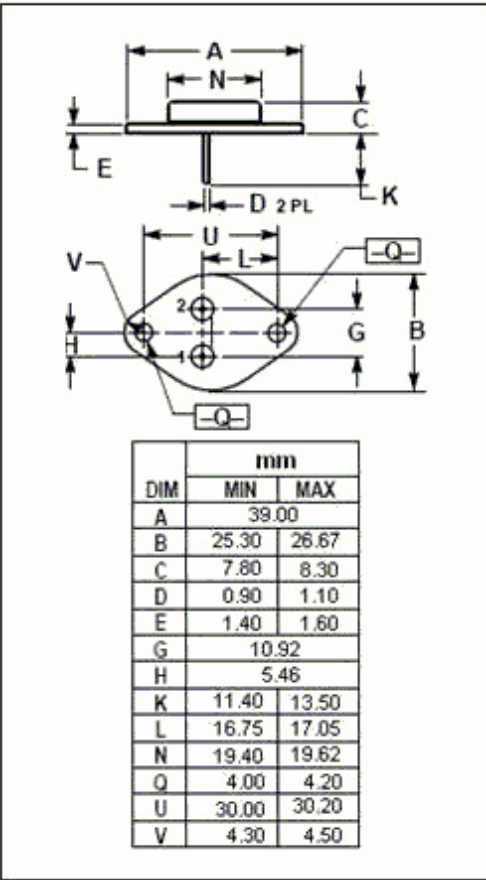


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

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°C	4.0	A
P _{tot}	Total Dissipation@TC=25°C	75	W
T _j	Max. Operating Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature Range	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance,Junction to Case	0.83	°C/W
R _{th j-a}	Thermal Resistance,Junction to Ambient	30	°C/W



isc N-Channel Mosfet Transistor**IRF432****• 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 =0.25mA	500			V
V _{GS(TH)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D =250μA	2		4	V
R _{DS(ON)}	Drain-Source On-stage Resistance	V _{GS} =10V; I _D =2.5A			2.0	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 =4.5A; V _{GS} =0			1.4	V
Ciss	Input Capacitance	V _{DS} =25V; V _{GS} =0V; f _T =1MHz		600		pF
Crss	Reverse Transfer Capacitance			100		
Coss	Output Capacitance			30		
tr	Rise Time	I _D =4.5A; V _{DD} =250V; R _G =12Ω		11	17	ns
td(on)	Turn-on Telay Time			15	23	
tf	Fall Time			35	53	
td(off)	Turn-off Delay Time			15	23	