

isc N-Channel Mosfet Transistor

IRF620FI

• FEATURES

- Low  $R_{DS(on)}$
- $V_{GS}$  Rated at  $\pm 20V$
- Silicon Gate for Fast Switching Speed
- Rugged
- Low Drive Requirements

• DESCRIPTION

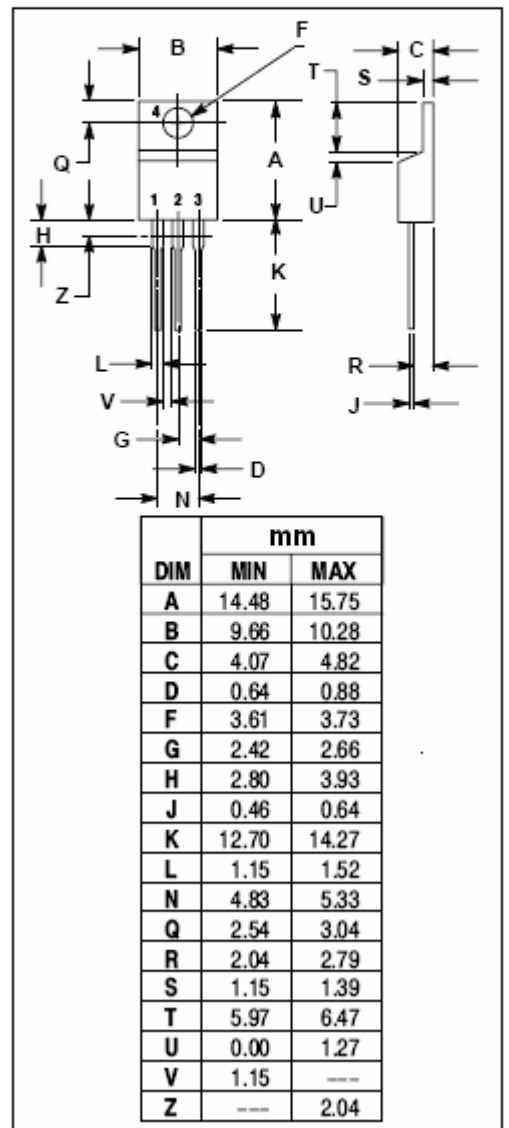
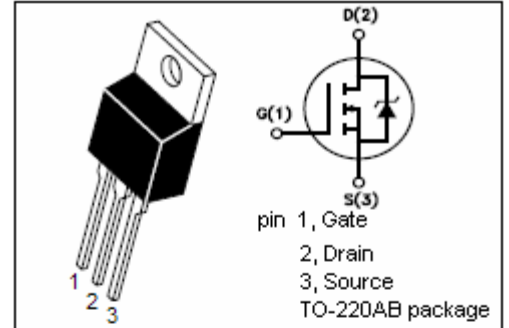
- Designed for high speed applications, such as switching power supplies , AC and DC motor controls, relay and solenoid drivers and other pulse.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage	200	V
$V_{GS}$	Gate-Source Voltage-Continuous	$\pm 20$	V
$I_D$	Drain Current-Continuous	4	A
$I_{DM}$	Drain Current-Single Plused	16	A
$P_D$	Total Dissipation @ $T_C=25^\circ C$	30	W
$T_j$	Max. Operating Junction Temperature	-55~150	$^\circ C$
$T_{stg}$	Storage Temperature	-55~150	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance,Junction to Case	3.12	$^\circ C/W$
$R_{th j-a}$	Thermal Resistance,Junction to Ambient	80	$^\circ C/W$



**isc N-Channel Mosfet Transistor****IRF620FI****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0; I_D=0.25\text{mA}$	200		V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}; I_D=0.25\text{mA}$	2	4	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}; I_D=3\text{A}$		0.8	$\Omega$
$I_{GSS}$	Gate-Body Leakage Current	$V_{GS}= \pm 20\text{V}; V_{DS}=0$		$\pm 500$	nA
$I_{DSS}$	Zero Gate Voltage Drain Current	$V_{DS}=200\text{V}; V_{GS}=0$		250	$\mu\text{A}$
$V_{SD}$	Forward On-Voltage	$I_S=4\text{A}; V_{GS}=0$		1.8	V