

isc N-Channel Mosfet Transistor

IRF840

• FEATURES

- Drain Current $-I_D=8.0A@ T_C=25^{\circ}C$
- Drain Source Voltage-
: $V_{DSS}= 500V(Min)$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 0.85 \Omega (Max)$

• DESCRIPTION

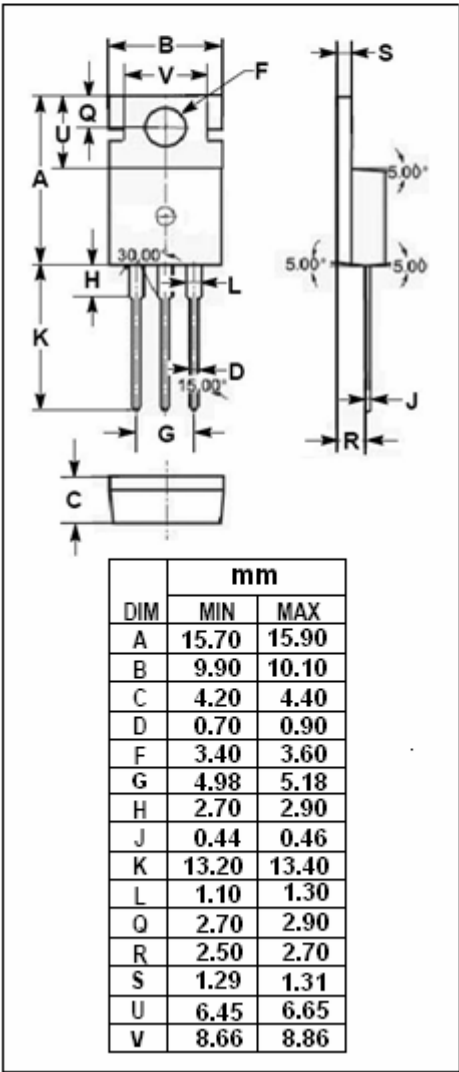
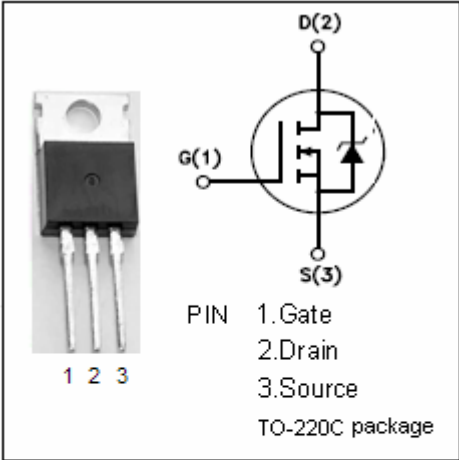
- Designed for high voltage, high speed switching power applications such as switching regulators, converters, solenoid and relay drivers.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	500	V
V_{GS}	Gate-Source Voltage-Continuous	± 20	V
I_D	Drain Current-Continuous	8	A
I_{DM}	Drain Current-Single Plused	32	A
P_D	Total Dissipation @ $T_C=25^{\circ}C$	125	W
T_j	Max. Operating Junction Temperature	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	1.0	$^{\circ}C/W$
$R_{th j-a}$	Thermal Resistance,Junction to Ambient	62.5	$^{\circ}C/W$



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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	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-Resistance	V _{GS} = 10V; I _D = 4A		0.85	Ω
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±20V; V _{DS} = 0		±500	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 500V; V _{GS} =0		250	nA
V _{SD}	Forward On-Voltage	I _S = 8A; V _{GS} =0		2.0	V

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