

isc N-Channel Mosfet Transistor

14N60

• FEATURES

- Drain Current $I_D = 14A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 600V (Min)$
- Low ON Resistance $R_{DS(on)} = 0.55 \Omega (Max)$
- International standard packages
- Avalanche rated

• DESCRIPTION

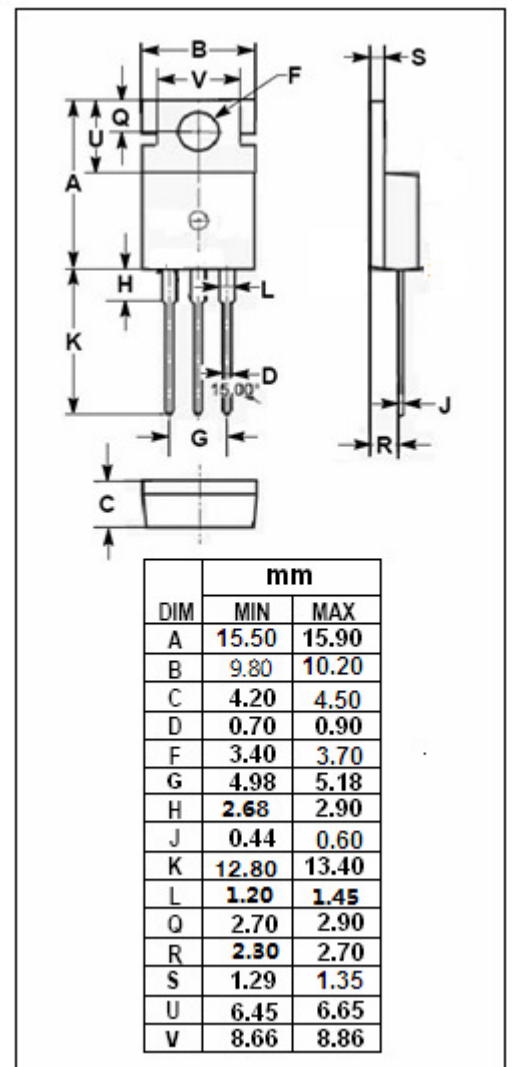
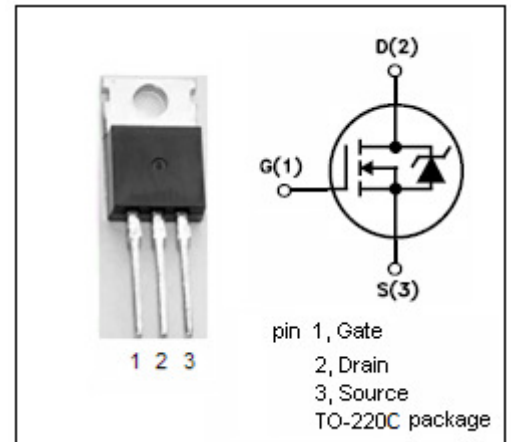
- Switched-mode and resonant-mode power supplies
- DC-DC Converters
- Laser Drivers
- AC and DC motor drives
- Robotics and servo controls

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	600	V
V_{GS}	Gate-Source Voltage-Continuous	± 30	V
I_D	Drain Current-Continuous	14	A
I_{DM}	Drain Current-Single Plused	42	A
P_D	Power Dissipation	112	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature range	-55~150	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	1.1	$^\circ C/W$
$R_{th j-a}$	Thermal Resistance, Junction to Ambient	65	$^\circ C/W$



isc N-Channel Mosfet Transistor**14N60****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0; I_D=0.25\text{mA}$	600		V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}; I_D=0.25\text{mA}$	3.0	5.5	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}; I_D=7\text{A}$		0.55	Ω
I_{GSS}	Gate-Body Leakage Current	$V_{GS}= \pm 30\text{V}; V_{DS}=0$		± 100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=600\text{V}; V_{GS}=0$		5	μA
V_{SD}	Forward On-Voltage	$I_S=14\text{A}; V_{GS}=0$		1.5	V