

isc N-Channel MOSFET Transistor

60N06-14

DESCRIPTION

- High current capability
- Avalanche rugged technology
- Low gate charge
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

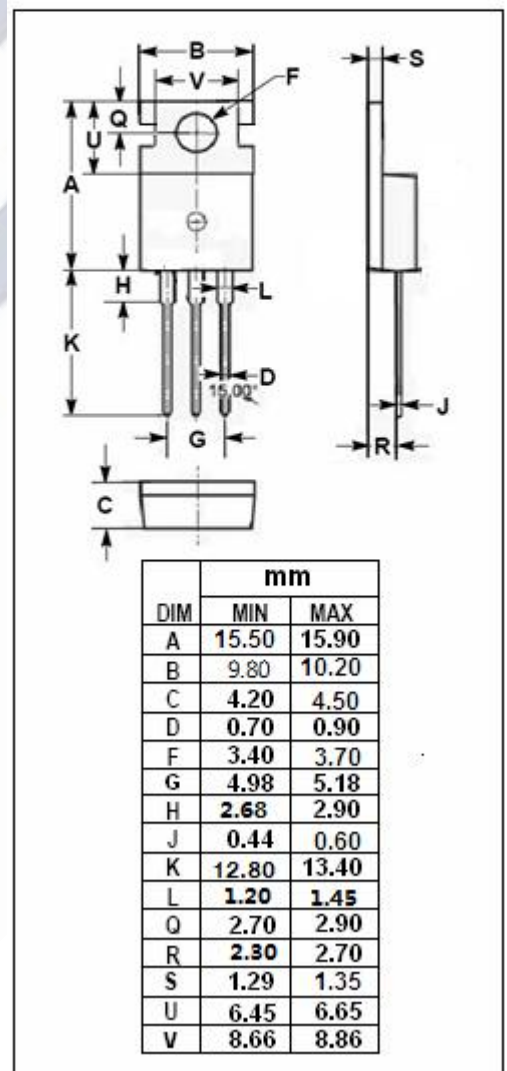
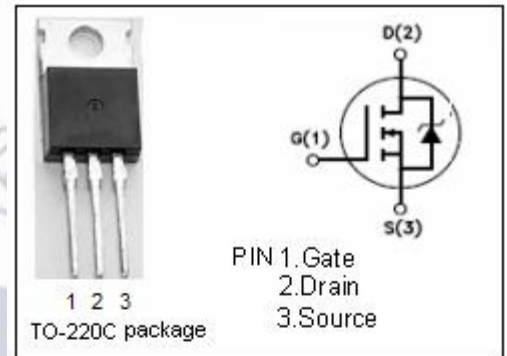
- Regulator
- High current,high speed switching
- Solenoid and relay drivers

ABSOLUTE MAXIMUM RATINGS(T_C=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage (V _{GS} =0)	60	V
V _{GS}	Gate-Source Voltage	±20	V
I _D	Drain Current-continuous@ T _C =25°C	60	A
	Drain Current-continuous@ T _C =100°C	50	
I _{D(puls)}	Pulse Drain Current	240	A
P _{tot}	Total Dissipation@T _C =25°C	150	W
T _j	Max. Operating Junction Temperature	175	°C
T _{stg}	Storage Temperature Range	-55~175	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.0	°C/W
R _{th j-a}	Thermal Resistance, Junction to Ambient	62.5	°C/W



isc N-Channel MOSFET Transistor**60N06-14**• ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0; I_D=250\mu\text{A}$	60			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}; I_D=250\mu\text{A}$	2.0		4.0	V
V_{SD}	Diode Forward On-Voltage	$I_S=60\text{A}; V_{GS}=0$			1.6	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}; I_D=30\text{A}$			14	$\text{m}\Omega$
I_{GSS}	Gate-Body Leakage Current	$V_{GS}=\pm 20\text{V}; V_{DS}=0$			± 100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=60\text{V}; V_{GS}=0$			250	μA