

isc N-Channel MOSFET Transistor

20N06

• FEATURES

- Drain Current $I_D = 20A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 60V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 0.085 \Omega (\text{Max})$
- Fast Switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

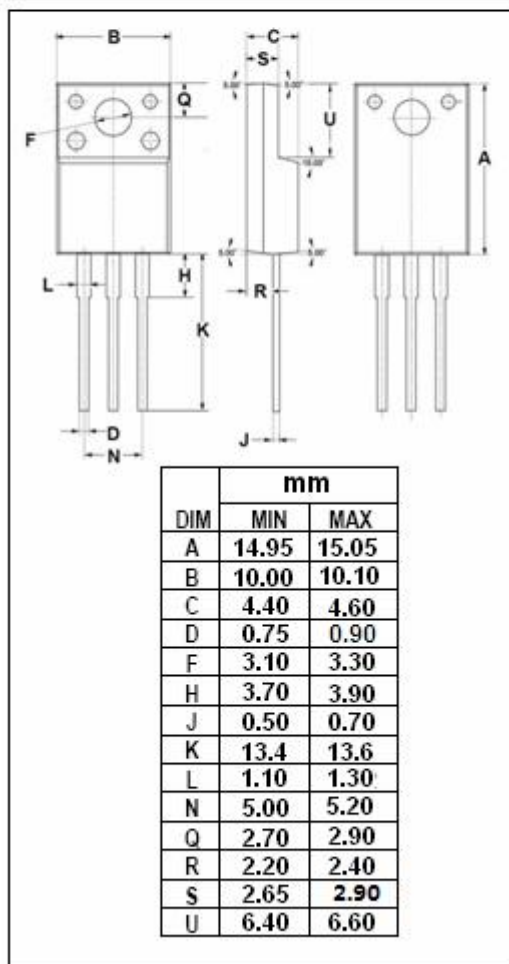
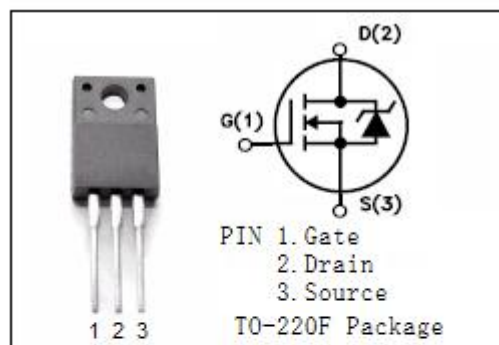
- Switching applications in power supplies
- Motor controls, high efficient DC to DC converters

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	60	V
V_{GS}	Gate-Source Voltage-Continuous	± 30	V
I_D	Drain Current-Continuous	20	A
I_{DM}	Drain Current-Single Pulsed	80	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	40	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	3.125	$^\circ C/W$



isc N-Channel MOSFET Transistor**20N06****• ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D =250μA	60			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D =250μA	2.0		4.0	V
V _{SD}	Diode Forward On-voltage	I _S = 20A; V _{GS} = 0			1.7	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 10A			0.085	Ω
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±30V; V _{DS} = 0			±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =60V; V _{GS} = 0			10	μA
C _{iss}	Input Capacitance	V _{DS} =25V; V _{GS} =0V; f _T =1MHz			850	pF
C _{rss}	Reverse Transfer capacitance				150	
C _{oss}	Output Capacitance				400	

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