

isc N-Channel MOSFET Transistor

FQP20N06L

DESCRIPTION

- Drain Current $I_D=21A@T_C=25^{\circ}C$
- Drain Source Voltage-
: $V_{DSS}=60V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 55m\Omega (\text{Max})$
- 100% Avalanche Tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

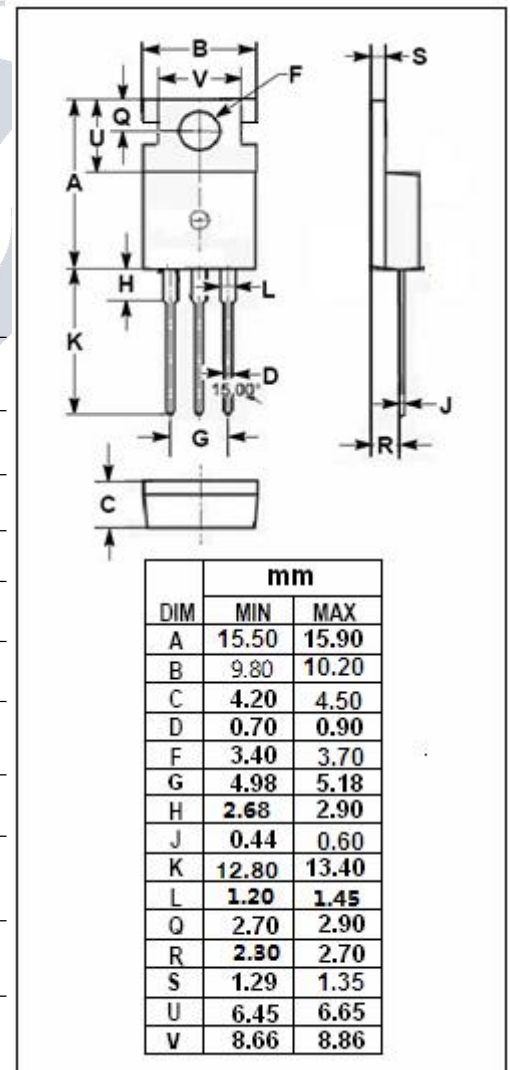
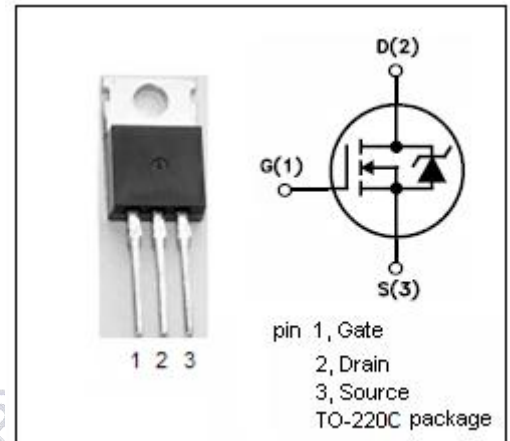
- High current , high speed switching
- Switch mode power supplies

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

SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	60	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-continuous@ $T_C=25^{\circ}C$	21	A
I_{DM}	Pulse Drain Current	84	A
P_D	Power Dissipation @ $T_C=25^{\circ}C$	60	W
T_j	Max. Operating Junction Temperature	-55~175	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~175	$^{\circ}C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to case	2.5	$^{\circ}C/W$



isc N-Channel MOSFET Transistor**FQP20N06L****• ELECTRICAL CHARACTERISTICS (T_c=25°C)**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 250uA	60			V
V _{GS(TH)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = 250uA	1	1.6	2.5	V
R _{DS(ON)}	Drain-Source On-stage Resistance	V _{GS} = 10V; I _D = 10A		35	55	mΩ
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0			±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 60V; V _{GS} = 0			1	uA
V _{SD}	Diode Forward Voltage	I _S = 21A; V _{GS} = 0			1.5	V

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