

## N-Channel Mosfet Transistor

## MTP6N60

### • FEATURES

- Drain Current  $-I_D = 6A @ T_C = 25^\circ C$
- Drain Source Voltage-  
:  $V_{DSS} = 600V(\text{Min})$
- Static Drain-Source On-Resistance  
:  $R_{DS(on)} = 1.2 \Omega (\text{Max})$
- Avalanche Energy Specified
- Fast Switching
- Simple Drive Requirements

### • DESCRIPTION

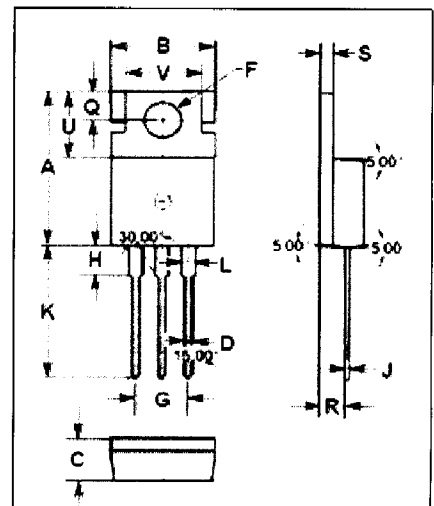
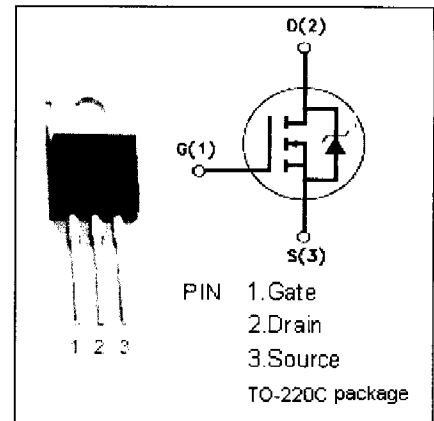
- Designed for high efficiency switch mode power supply.

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

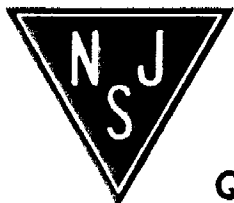
SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage	600	V
$V_{GS}$	Gate-Source Voltage-Continuous	$\pm 20$	V
$I_D$	Drain Current-Continuous	6	A
$I_{DM}$	Drain Current-Single Pulsed	24	A
$P_D$	Total Dissipation @ $T_C = 25^\circ C$	125	W
$T_j$	Max. Operating Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature	-55~150	$^\circ C$

### • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	1	$^\circ C/W$
$R_{th j-a}$	Thermal Resistance, Junction to Ambient	62.5	$^\circ C/W$



DIM	mm	
	MIN	MAX
A	15.70	15.90
B	9.90	10.10
C	4.20	4.40
D	0.70	0.90
E	3.40	3.60
F	4.98	5.18
G	2.70	2.90
H	0.44	0.46
J	13.20	13.40
K	1.10	1.30
L	2.70	2.90
M	2.50	2.70
N	1.29	1.31
O	6.45	6.65
P	8.66	8.86



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### 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	$V_{DS}=V_{GS}; I_D=0.25\text{mA}$	2	4	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}; I_D=3\text{A}$		1.2	$\Omega$
$I_{GSS}$	Gate-Body Leakage Current	$V_{GS}=\pm 20\text{V}; V_{DS}=0$		$\pm 100$	nA
$I_{DSS}$	Zero Gate Voltage Drain Current	$V_{DS}=600\text{V}; V_{GS}=0$		1	$\mu\text{A}$
$V_{SD}$	Forward On-Voltage	$I_S=6\text{A}; V_{GS}=0$		1.8	V