

# New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.  
SPRINGFIELD, NEW JERSEY 07081  
U.S.A.

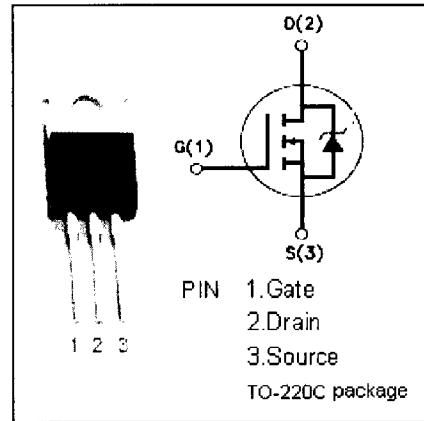
TELEPHONE: (973) 376-2922  
(212) 227-6005  
FAX: (973) 376-8960

## N-Channel Mosfet Transistor

## MTP4N60

### • FEATURES

- Drain Current  $-I_D = 4A @ T_c=25^\circ C$
- Drain Source Voltage-
  - :  $V_{DSS} = 600V$ (Min)
- Static Drain-Source On-Resistance
  - :  $R_{DS(on)} = 2.2 \Omega$  (Max)
- Avalanche Energy Specified
- Fast Switching
- Simple Drive Requirements

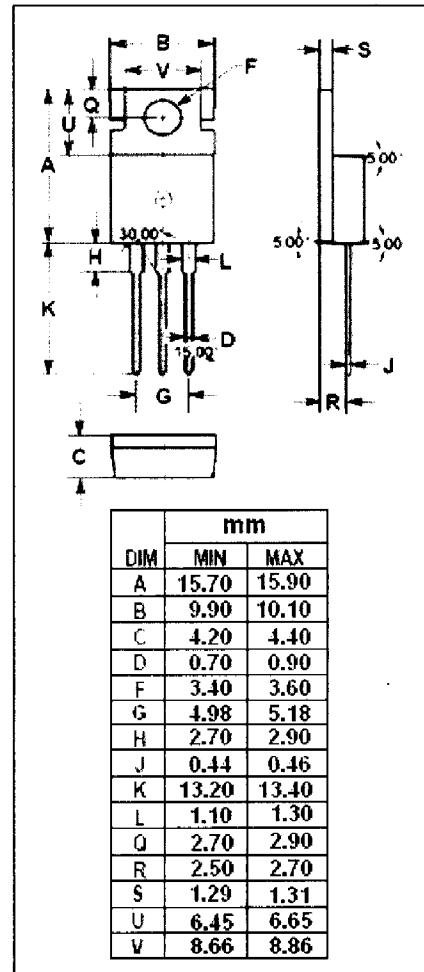


### • DESCRIPTION

- 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	4	A
$I_{DM}$	Drain Current-Single Plused	16	A
$P_D$	Total Dissipation @ $T_c=25^\circ C$	104	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	1.2	$^\circ C/W$
$R_{th(j-a)}$	Thermal Resistance, Junction to Ambient	62.5	$^\circ C/W$

N  
J  
S

Quality Semi-Conductors

## N-Channel Mosfet Transistor

---

### ELECTRICAL CHARACTERISTICS

T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 0.25mA	600		V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> = 0.25mA	2	4	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 2A		2.2	Ω
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±20V; V <sub>DS</sub> = 0		±100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 600V; V <sub>GS</sub> = 0		1	μ A
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 4A; V <sub>GS</sub> = 0		2.0	V