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NTE2393 MOSFET N-Channel Enhancement Mode, High Speed Switch TO3P Type Package

Description:

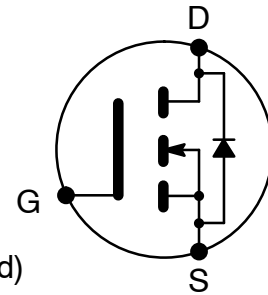
The NTE2393 is an N-Channel Enhancement Mode Power MOS Field Effect Transistor in a TO3P type package designed especially for high voltage, high speed applications such as off-line switching power supplies, UPS, AC and DC motor controls, relays, and solenoid drivers.

Features:

- Drain Current: $I_D = 10A$ at $T_C = +25^\circ C$
- Drain Source Voltage: $V_{DSS} = 500V$ Min

Industrial Applications:

- Switching Mode Power Supplies
- Motor Controls



Absolute Maximum Ratings: ($T_A = +25^\circ C$ unless otherwise specified)

Drain-Source Voltage ($V_{GS} = 0$), V_{DSS}	500V
Gate-Source Voltage, V_{GS}	$\pm 20V$
Continuous Drain Current ($T_C = +25^\circ C$), I_D	10A
Total Dissipation ($T_C = +25^\circ C$), P_{tot}	125W
Maximum Operating Junction Temperature, T_J	$+150^\circ C$

Electrical Characteristics: ($T_C = +25^\circ C$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	$I_D = 10mA, V_{GS} = 0$	500	-	-	V
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = 10V, I_D = 1mA$	2.1	3.0	4.0	V
Drain-Source On Resistance	$R_{DS(on)}$	$V_{GS} = 10V, I_D = 5A$	-	0.5	0.67	Ω
Diode Forward Voltage	V_{SD}	$I_F = 10A, V_{GS} = 0$	-	1.1	1.7	V
Gate-Body Leakage Current	I_{GSS}	$V_{DS} = 0, V_{GS} = \pm 20V$	-	-	± 100	nA
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 500V, V_{GS} = 0$	-	-	500	μA
Turn-On Time	t_{on}	$V_{GS} = 10V, I_D = 2.8A,$ $R_L = 50\Omega$	-	130	195	ns
Turn-Off Time	t_{off}		-	440	570	ns

