



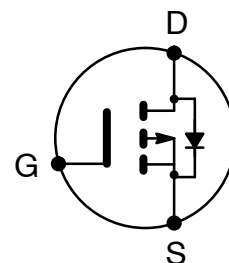
ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089
<http://www.nteinc.com>



NTE2998
MOSFET
P-Channel, Enhancement Mode
High Speed Switch
(Compl to NTE2906)
TO3 Type Package

Features:

- High Speed Switching
- High Voltage
- High Energy Rating
- Enhancement Mode
- Integral Protection Diode



Absolute Maximum Ratings: ($T_C = +25\text{ C}$ unless otherwise specified)

Drain-Source Voltage, V_{DSX}	200V
Gate-Source Voltage, V_{GSS}	$\mu 14V$
Continuous Drain Current, I_D	8A
Body Drain Diode, $I_{D(PK)}$	8A
Total Power Dissipation ($T_C = +25\text{ C}$), P_D	125W
Maximum Operating Junction Temperature, T_J	+150 C
Storage Temperature Range, T_{stg}	-55 to +150 C
Thermal Resistance, Junction-to-Case, R_{thJC}	1.0 C/W

Electrical Characteristics: ($T_C = +25\text{ C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Static Characteristics						
Drain-Source Breakdown Voltage	BV_{DSX}	$V_{GS} = 10V, I_D = 10mA$	200	-	-	V
Gate-Source Breakdown Voltage	BV_{GSS}	$V_{DS} = 0, I_G = \mu 100\mu A$	$\mu 14$	-	-	V
Gate-Source Cut-Off Voltage	$V_{GS(OFF)}$	$V_{DS} = 10V, I_D = 100mA$	0.15	-	1.5	V
Drain-Source Saturation Voltage	$V_{DS(SAT)}$	$V_{GD} = 0, I_D = 8A, \text{Note 1}$	-	-	12	V
Drain-Source Cut-Off Current	I_{DSX}	$V_{GS} = 10V, V_{DS} = 200V$	-	-	10	mA
Forward Transfer Admittance	y_{fs}	$V_{DS} = 10V, I_D = 3A, \text{Note 1}$	0.7	-	2.0	S

Note 1. Pulse Test: Pulse Width = 300 μs , Duty Cycle 2%.

Electrical Characteristics (Cont'd): ($T_C = +25\text{ C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Dynamic Characteristics						
Input Capacitance	C_{iss}	$V_{DS} = 10V, f = 1MHz$	-	734	-	pF
Output Capacitance	C_{oss}		-	300	-	pF
Reverse Transfer Capacitance	C_{rss}		-	26	-	pF
Turn-On Time	t_{on}	$V_{DS} = 20V, I_D = 5A$	-	120	-	ns
Turn-Off Time	t_{off}		-	60	-	ns

