

این دیتاشیت توسط توکل الکترونیک تهیه و ارائه شده است.  
جهت مشاهده قیمت، موجودی و ثبت سفارش این قطعه به وبسایت توکل الکترونیک مراجعه فرمایید.



**مشاهده قیمت و خرید**

برای خرید و مشاهده سایر محصولات کلیک کنید



6427525 N E C ELECTRONICS INC

98D 18945 DT-39-13

## N-CHANNEL MOS FIELD EFFECT POWER TRANSISTOR

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# 2SK798

### DESCRIPTION

The 2SK798 is N-Channel MOS Field Effect Power Transistor designed for solenoid, motor and lamp driver.

### FEATURES

- 4 V Gate Drive – Logic level –
- Low  $R_{DS(on)}$
- No Secondary Breakdown

### ABSOLUTE MAXIMUM RATINGS

Maximum Temperatures

Storage Temperature . . . . .  $-55$  to  $+150$  °C

Channel Temperature . . . . .  $150$  °C Maximum

Maximum Power Dissipations

Total Power Dissipation ( $T_a = 25$  °C) . . . . .  $3.0$  W

Total Power Dissipation ( $T_c = 25$  °C) . . . . .  $150$  W

Maximum Voltages and Currents ( $T_a = 25$  °C)

$V_{DS}$  Drain to Source Voltage . . . . .  $100$  V

$V_{GS}$  Gate to Source Voltage . . . . .  $\pm 20$  V

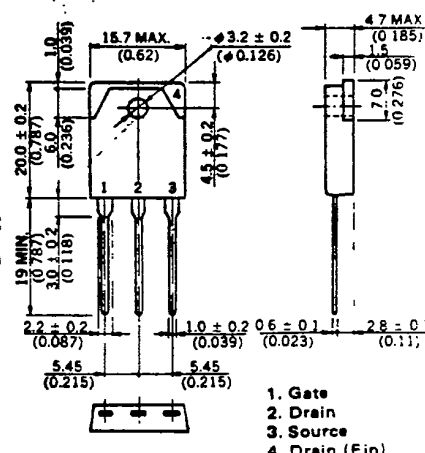
$I_{D(DC)}$  Drain Current (DC) . . . . .  $\pm 40$  A

$I_{D(pulse)}$  Drain Current (pulse)\* . . . . .  $\pm 160$  A

\*  $PW \leq 300$   $\mu$ s, Duty Cycle  $\leq 2$  %

### PACKAGE DIMENSIONS

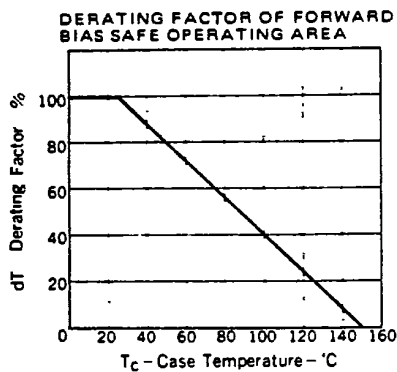
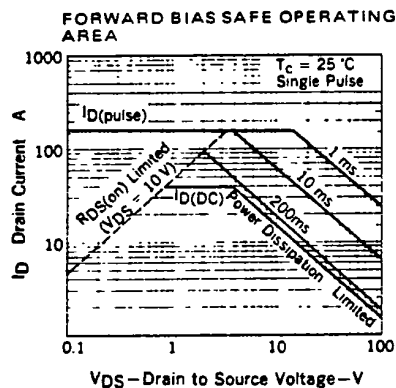
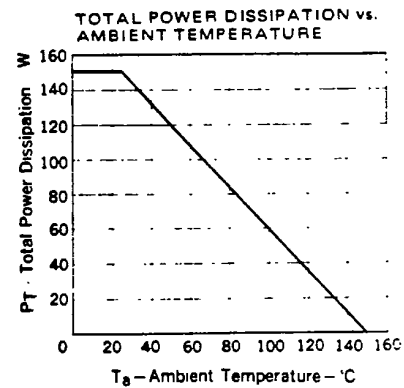
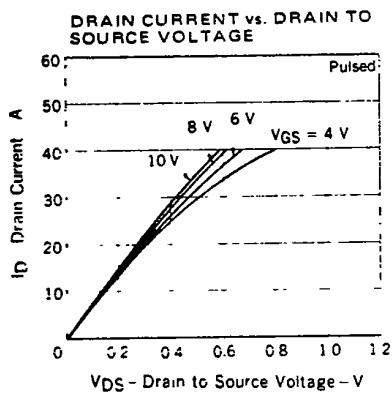
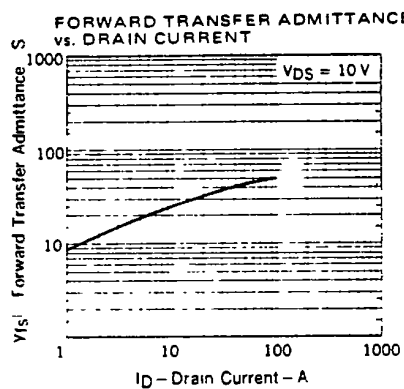
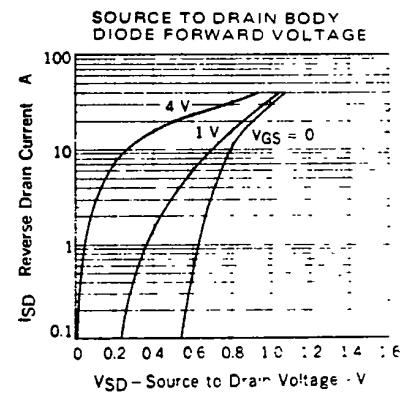
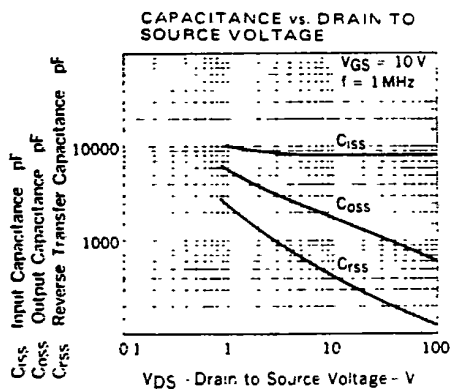
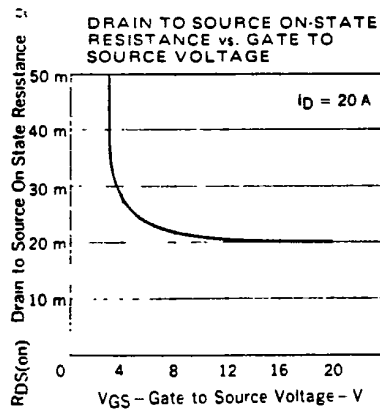
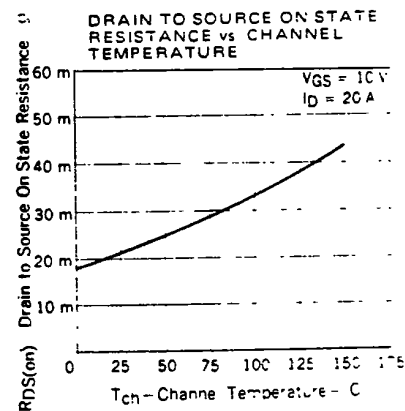
in millimeters (inches)

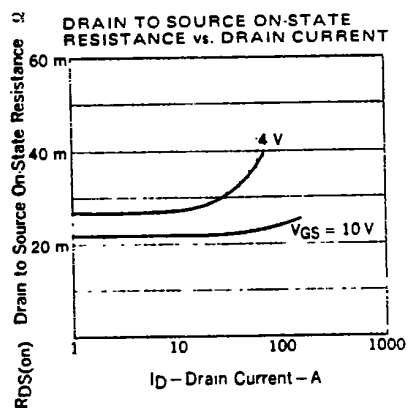
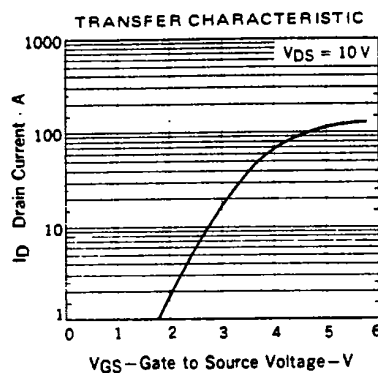
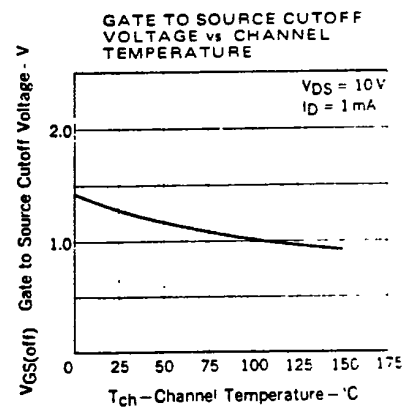
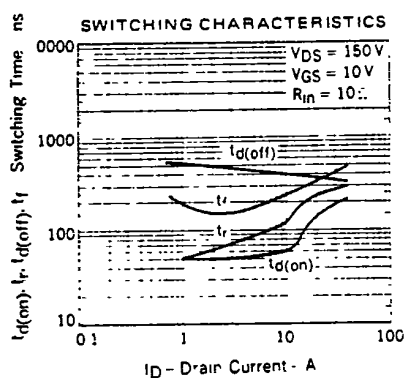
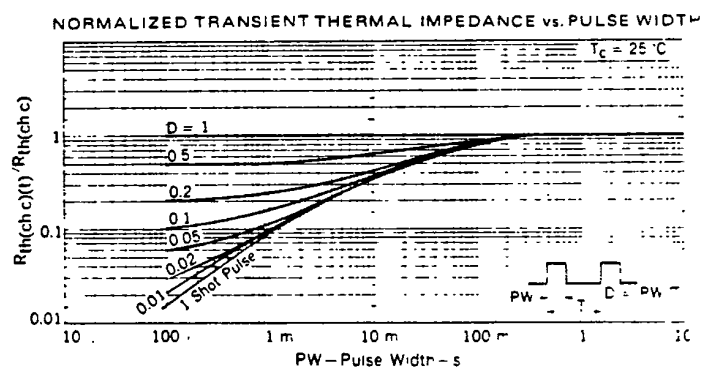


### ELECTRICAL CHARACTERISTICS ( $T_a = 25$ °C)

| SYMBOL        | CHARACTERISTIC                      | MIN. | TYP. | MAX.      | UNIT       | TEST CONDITIONS                                                                 |
|---------------|-------------------------------------|------|------|-----------|------------|---------------------------------------------------------------------------------|
| $R_{DS(on)}$  | Drain to Source On-State Resistance |      |      | 31        | m $\Omega$ | $V_{GS} = 10$ V, $I_D = 20$ A                                                   |
| $R_{DS(on)}$  | Drain to Source On-State Resistance |      |      | 40        | m $\Omega$ | $V_{GS} = 4$ V, $I_D = 20$ A                                                    |
| $V_{GS(off)}$ | Gate to Source Cutoff Voltage       | 1.0  |      | 2.5       | V          | $V_{DS} = 10$ V, $I_D = 1$ mA                                                   |
| $ Y_{fs} $    | Forward Transfer Admittance         | 5.0  |      |           | S          | $V_{DS} = 10$ V, $I_D = 20$ A                                                   |
| $I_{DSS}$     | Drain Leakage Current               |      |      | 100       | $\mu$ A    | $V_{DS} = 100$ V, $V_{GS} = 0$                                                  |
| $I_{GSS}$     | Gate to Source Leakage Current      |      |      | $\pm 100$ | nA         | $V_{GS} = \pm 20$ V, $V_{DS} = 0$                                               |
| $C_{iss}$     | Input Capacitance                   |      | 8000 |           | pF         | $V_{DS} = 10$ V                                                                 |
| $C_{oss}$     | Output Capacitance                  |      | 1800 |           | pF         | $V_{GS} = 0$                                                                    |
| $C_{rss}$     | Reverse Transfer Capacitance        |      | 450  |           | pF         | $f = 1$ MHz                                                                     |
| $t_{d(on)}$   | Turn-On Delay Time                  |      | 60   |           | ns         | $I_D = 20$ A, $V_{CC} = 50$ V<br>$R_L = 2.5$ $\Omega$<br>$R_{in} = 10$ $\Omega$ |
| $t_r$         | Rise Time                           |      | 120  |           | ns         |                                                                                 |
| $t_{d(off)}$  | Turn-Off Delay Time                 |      | 400  |           | ns         |                                                                                 |
| $t_f$         | Fall Time                           |      | 250  |           | ns         |                                                                                 |

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TYPICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )



### SWITCHING TIME TEST CIRCUIT

