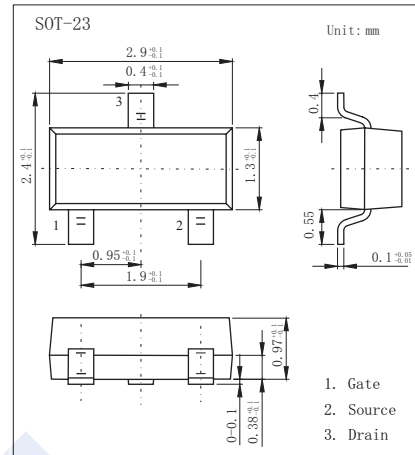
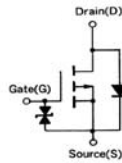


P-Channel MOSFET

NTR5105P

■ Features

- $V_{DS} = -60V$
- $I_D = -200mA$
- $R_{DS(ON)} < 10\Omega$ ($V_{GS} = -10V$)
- $R_{DS(ON)} < 15\Omega$ ($V_{GS} = -4V$)

■ Absolute Maximum Ratings $T_a = 25^\circ C$

| Parameter | Symbol | Rating | Unit |
|------------------------------------|-----------|------------|------------|
| Drain-Source Voltage | V_{DS} | -60 | V |
| Gate-Source Voltage | V_{GS} | ± 20 | |
| Continuous Drain Current | I_D | -200 | mA |
| Pulsed Drain Current (Note.1) | I_{DM} | -400 | |
| Power Dissipation | P_D | 200 | mW |
| Junction Temperature | T_J | 150 | $^\circ C$ |
| Junction Storage Temperature Range | T_{stg} | -55 to 150 | |

Note.1: $PW \leq 10ms$, Duty Cycle $\leq 50\%$

■ Electrical Characteristics $T_a = 25^\circ C$

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|-----------------------------------|---------------|---|------|-----|---------|----------|
| Drain-Source Breakdown Voltage | V_{DSS} | $I_D = -250\mu A$, $V_{GS} = 0V$ | -60 | | | V |
| Zero Gate Voltage Drain Current | I_{DSS} | $V_{DS} = -60V$, $V_{GS} = 0V$ | | | -1 | μA |
| Gate-Body leakage current | I_{GSS} | $V_{DS} = 0V$, $V_{GS} = \pm 20V$ | | | ± 1 | μA |
| Gate Cut off Voltage | $V_{GS(off)}$ | $V_{DS} = -5V$, $I_D = -1\mu A$ | -1.4 | | -2.4 | V |
| Static Drain-Source On-Resistance | $R_{DS(on)}$ | $V_{GS} = -4V$, $I_D = -10mA$ | | | 15 | Ω |
| | | $V_{GS} = -10V$, $I_D = -10mA$ | | | 10 | |
| Forward Transconductance | g_{FS} | $V_{DS} = -5V$, $I_D = -10mA$ | 20 | 45 | | mS |
| Input Capacitance | C_{iss} | $V_{GS} = 0V$, $V_{DS} = -5V$, $f = 1MHz$ | | 27 | | pF |
| Output Capacitance | C_{oss} | | | 21 | | |
| Reverse Transfer Capacitance | C_{rss} | | | 3 | | |
| Turn-On DelayTime | $t_{d(on)}$ | | | | 120 | |
| Turn-On Rise Time | t_r | $V_{GS(on)} = -4V$, $V_{DS} = -5V$, $I_D = -10mA$, $R_L = 500\Omega$, $R_{GEN} = 10\Omega$ | | 190 | | |
| Turn-Off DelayTime | $t_{d(off)}$ | | | 150 | | |
| Turn-Off Fall Time | t_f | | | 180 | | |

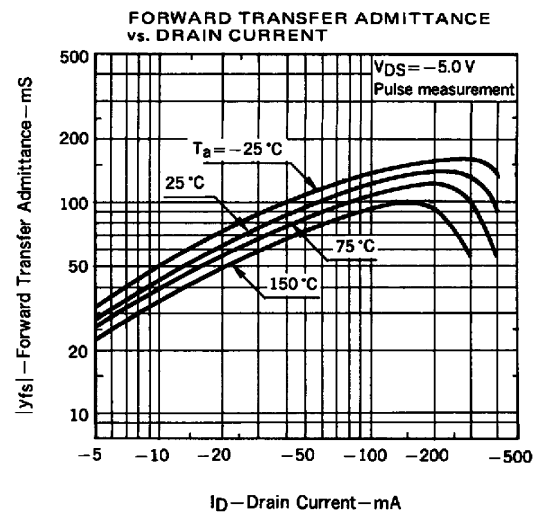
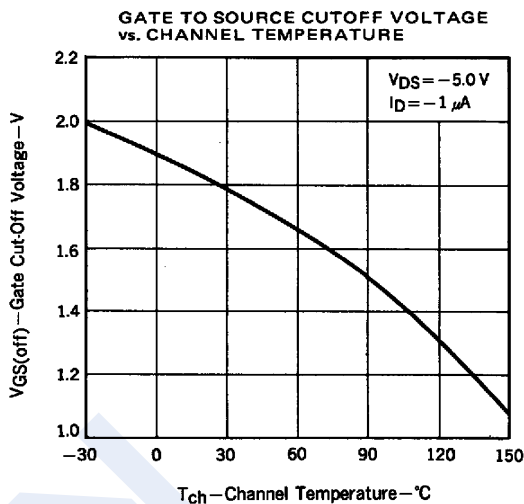
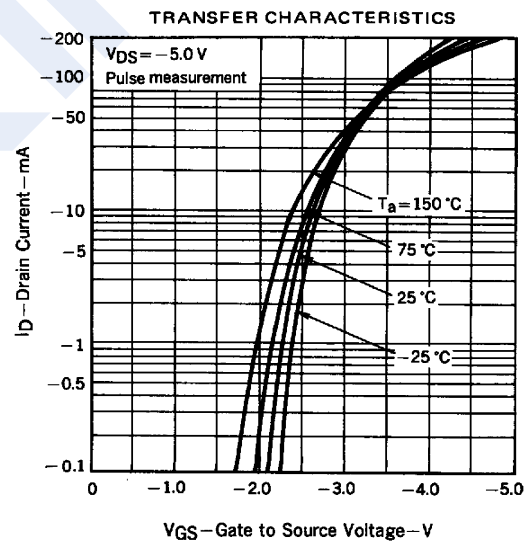
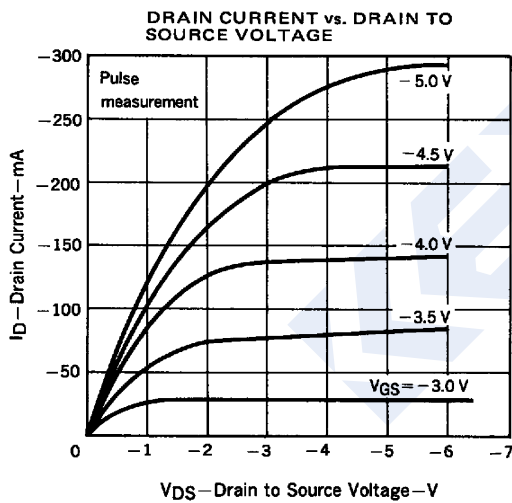
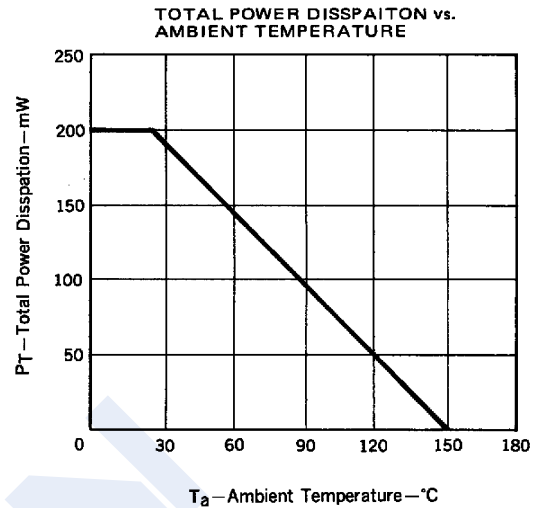
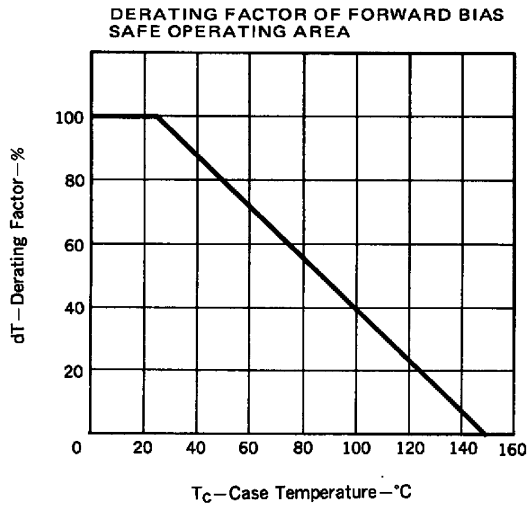
■ Marking

| | |
|---------|-----|
| Marking | H16 |
|---------|-----|

P-Channel MOSFET

NTR5105P

Typical Characteristics



P-Channel MOSFET

NTR5105P

Typical Characteristics

