

| | | |
|--------------|---------|--|
| SANYO | No.2746 | 2SK1065 |
| | | N-Channel Junction Silicon FET High-Frequency General-Purpose Amp Applications |

Features

- Very small-sized package permitting 2SK1065-applied sets to be made smaller and slimmer
- Small c_{rss} ($c_{rss} = 0.04\text{pF}$ typ)

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

| | | | unit |
|-----------------------------|-----------|-------------|------------------|
| Gate to Drain Voltage | V_{GDO} | -20 | V |
| Gate Current | I_G | 10 | mA |
| Drain Current | I_D | 20 | mA |
| Allowable Power Dissipation | P_D | 150 | mW |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

Electrical Characteristics at $T_a = 25^\circ\text{C}$

| | | min | typ | max | unit |
|---------------------------------|---|-----------------------------|------|---------------|------|
| Gate to Drain Breakdown Voltage | $V_{(BR)GDO}$ $I_G = -10\mu\text{A}$ | -20 | | | V |
| Gate Cutoff Current | I_{GSS} $V_{GS} = -0.5\text{V}, V_{DS} = 0$ | | | -10 | nA |
| Cutoff Voltage | $V_{GS(off)}$ $V_{DS} = 5\text{V}, I_D = 10\mu\text{A}$ | -0.4 | -1.3 | -2.5 | V |
| Drain Current | I_{DSS} $V_{DS} = 5\text{V}, V_{GS} = 0$ | $\times 1.2$ | | $\times 12.0$ | mA |
| Forward Transfer Admittance | $ y_{fs} (1)$ $V_{DS} = 5\text{V}, V_{GS} = 0, f = 1\text{kHz}$ | 2.4 | 6.0 | | mS |
| | $ y_{fs} (2)$ $V_{DS} = 5\text{V}, V_{GS} = 0, f = 100\text{MHz}$ | 2.4 | 6.0 | | mS |
| Input Capacitance | c_{iss} $V_{DS} = 5\text{V}, V_{GS} = 0, f = 1\text{MHz}$ | | 4.0 | | pF |
| Reverse Transfer Capacitance | c_{rss} $V_{DS} = 5\text{V}, V_{GS} = 0, f = 1\text{MHz}$ | 0.04 | 0.15 | | pF |
| Output Capacitance | c_{oss} $V_{DS} = 5\text{V}, V_{GS} = 0, f = 1\text{MHz}$ | | 4.0 | | pF |
| Power Gain | PG $V_{DS} = 5\text{V}, V_{GS} = 0, f = 100\text{MHz}$ | | 24 | | dB |
| Noise Figure | NF | See specified Test Circuit. | | | |
| | | 3.5 | 6.0 | | dB |

※: The 2SK1065 is classified by I_{DSS} as follows (unit: mA):

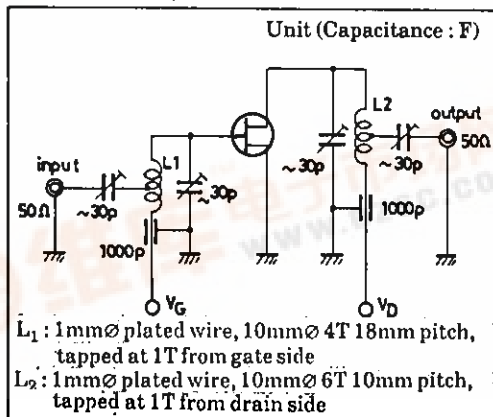
| | | | | | | | | |
|-----|---|-----|-----|---|-----|-----|---|------|
| 1.2 | 3 | 3.0 | 2.5 | 4 | 6.0 | 5.0 | 5 | 12.0 |
|-----|---|-----|-----|---|-----|-----|---|------|

(Note) Marking: T

I_{DSS} rank: 3, 4, 5

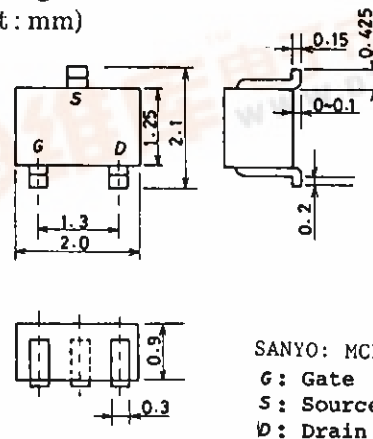
• For CP package version, use the 2SK242.

PG, NF Test Circuit

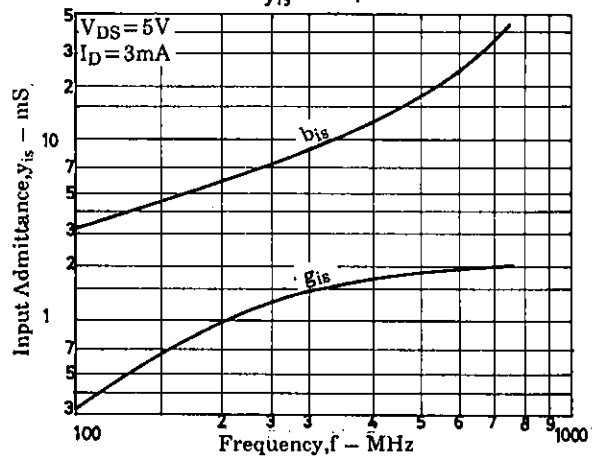
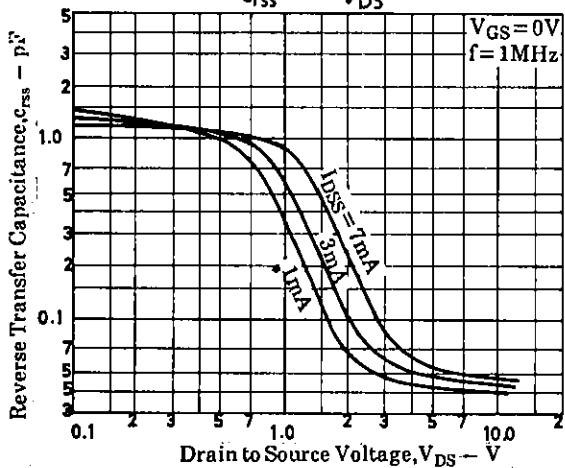
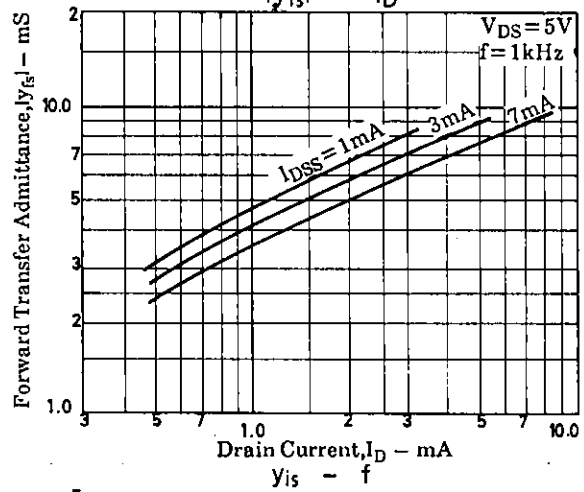
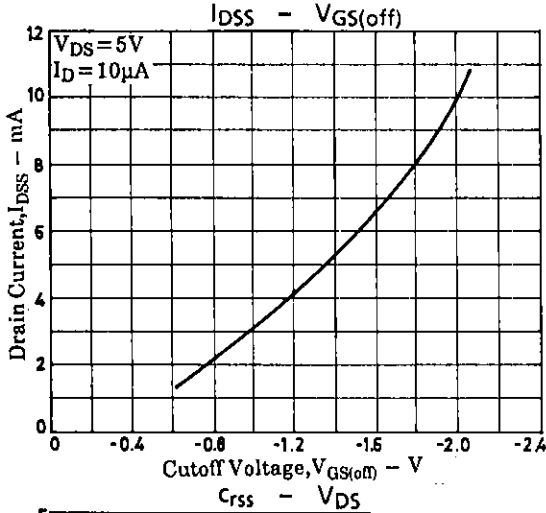
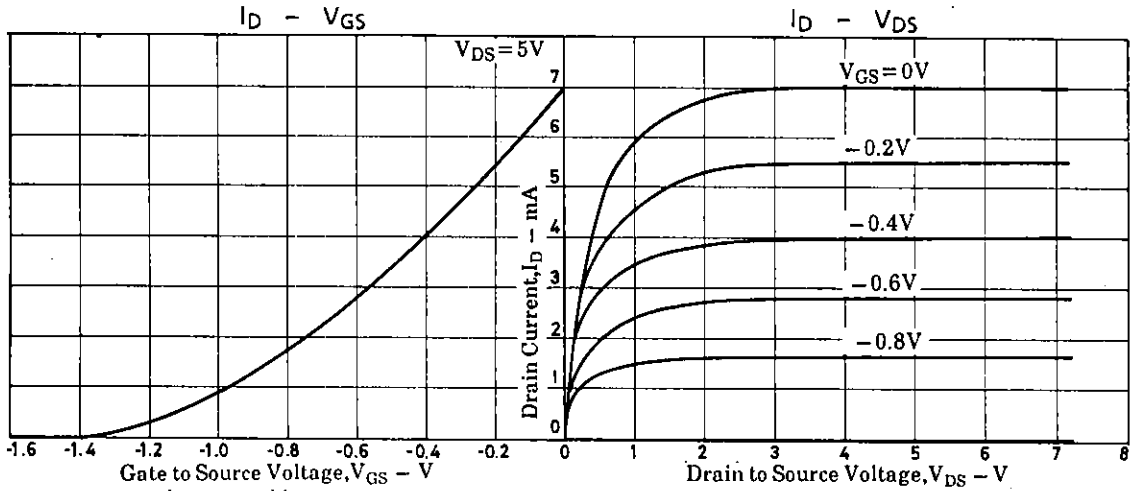
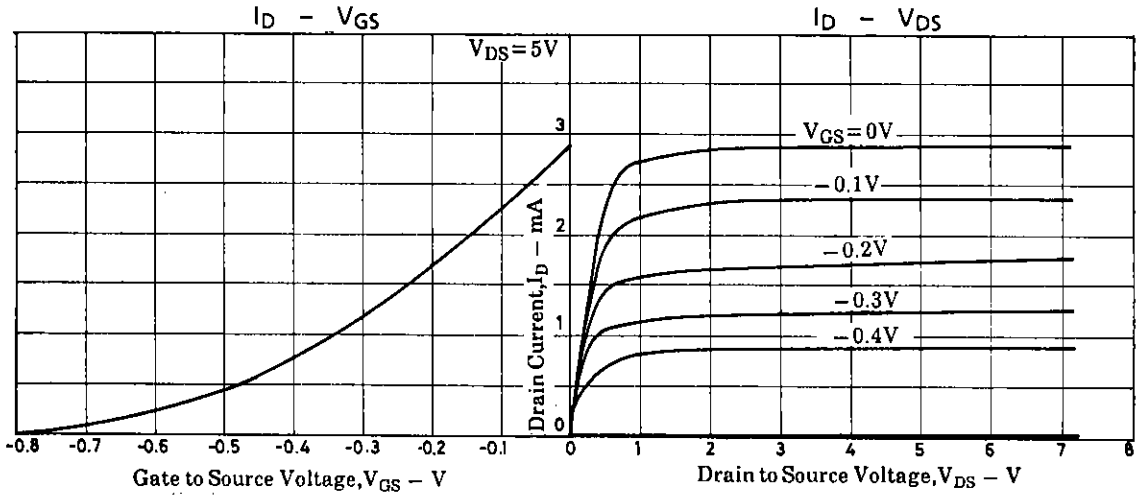


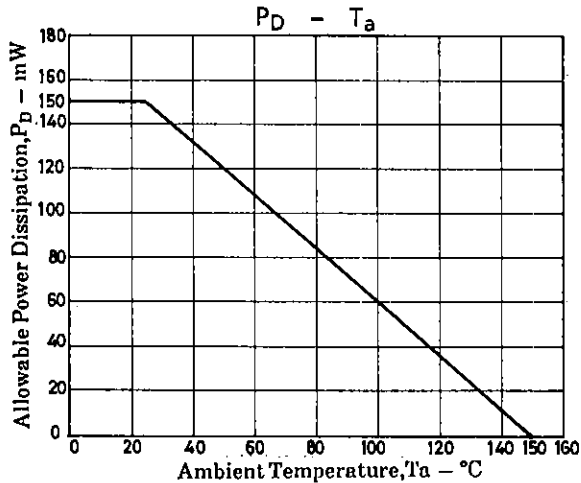
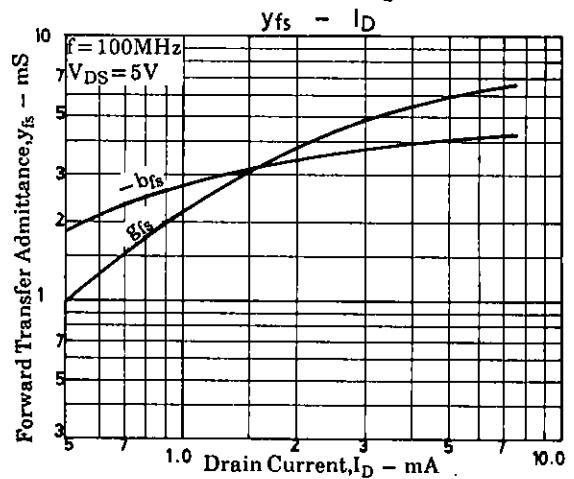
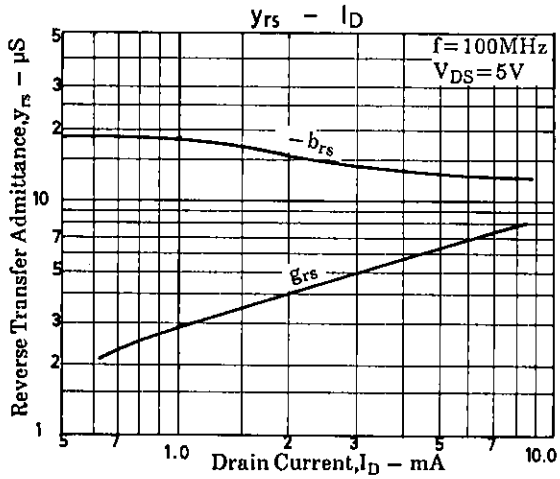
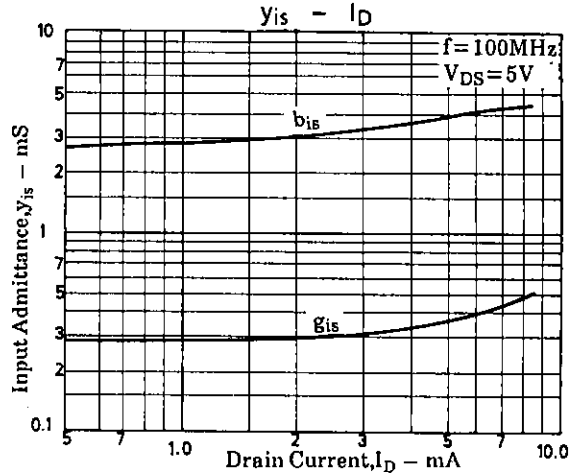
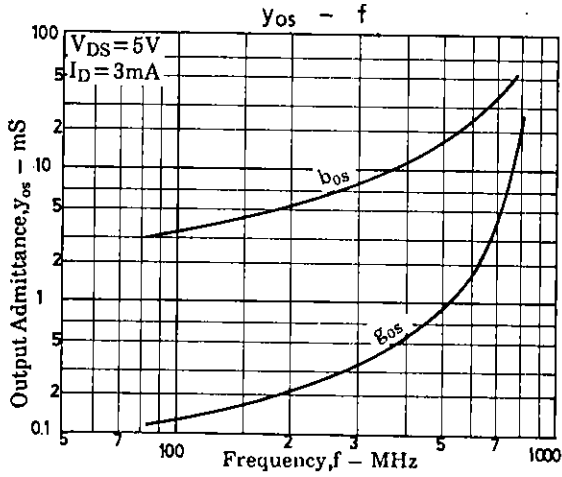
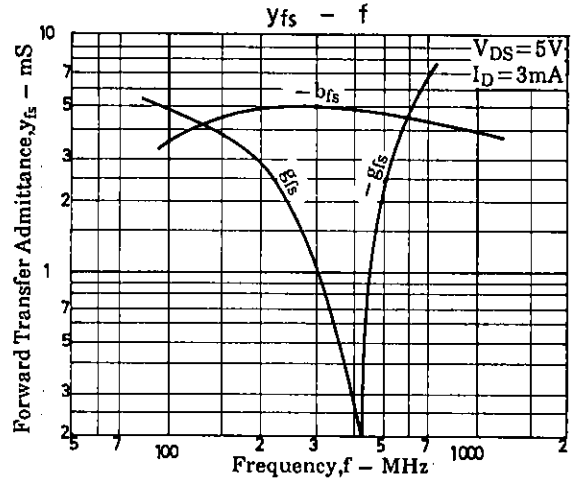
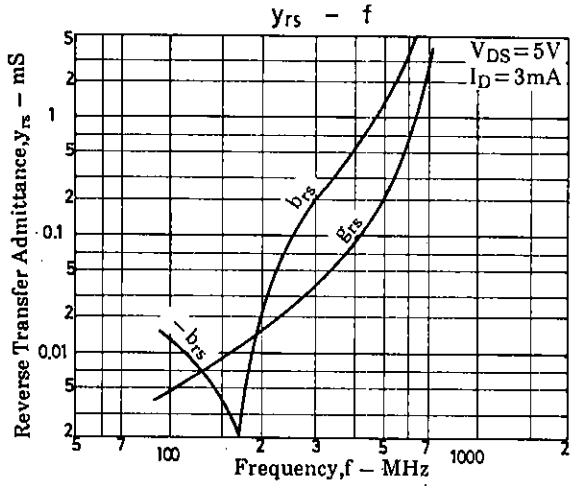
Package Dimensions 2057

(unit: mm)



2SK1065





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