

2SK3079

900 MHz BAND AMPLIFIER APPLICATIONS (GSM)

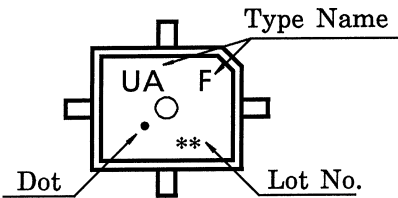
- Output Power : P_O = 35.5 dBmW (Min.)
- Gain : G_p = 9.5 dB (Min.)
- Drain Efficiency : η_D = 58% (Typ.)

MAXIMUM RATINGS (Ta = 25°C)

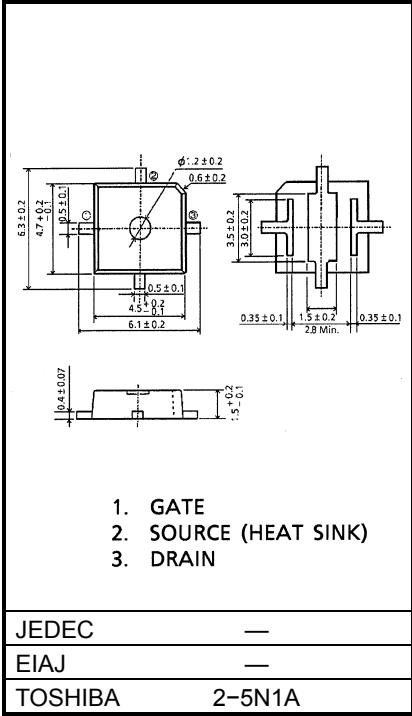
| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---------------------------|------------------|---------|------|
| Drain-Source Voltage | V _{DSS} | 10 | V |
| Gate-Source Voltage | V _{GSS} | 5 | V |
| Drain Current | I _D | 5 | A |
| Power Dissipation | P _D * | 20.0 | W |
| Channel Temperature | T _{ch} | 150 | °C |
| Storage Temperature Range | T _{stg} | -45~150 | °C |

*: T_c = 25°C When mounted on a 1.6 mm glass epoxy PCB

MARKING



Unit: mm



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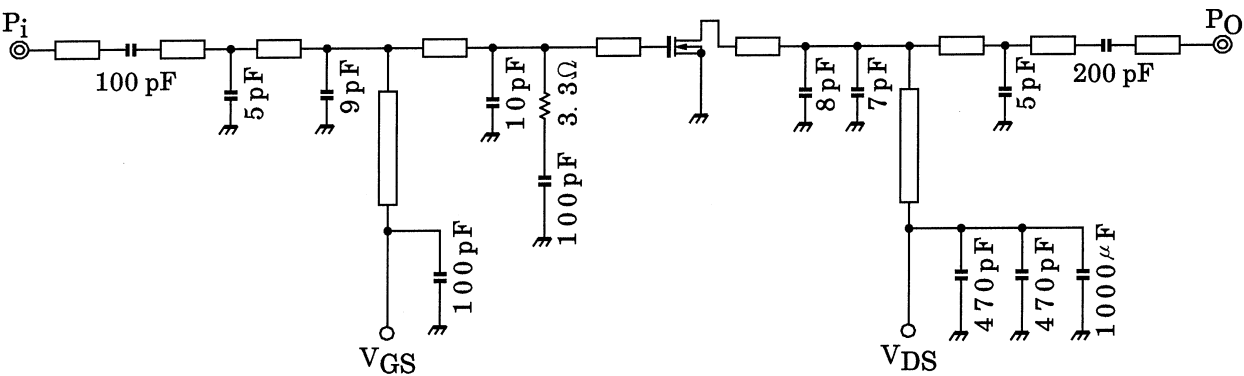
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

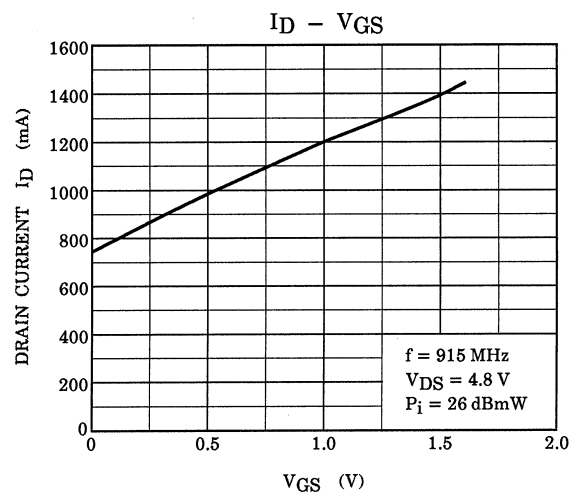
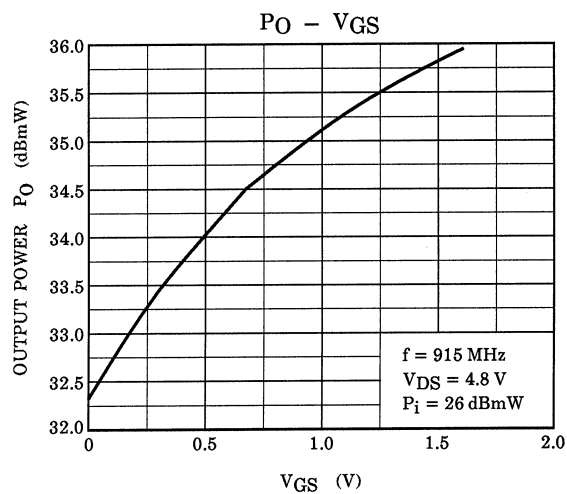
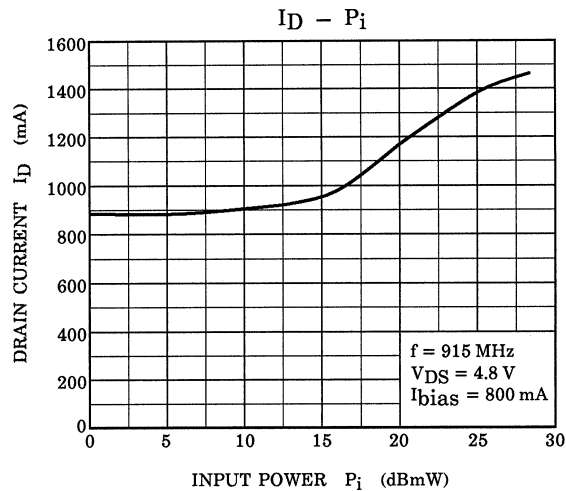
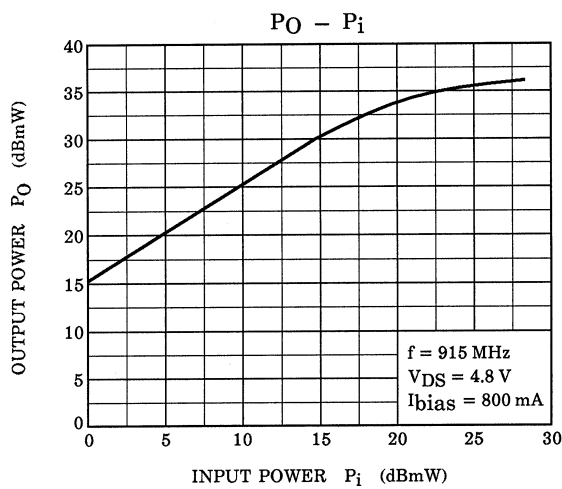
| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN | TYP. | MAX | UNIT |
|-----------------------------|------------------|---|----------------|------|------|------|
| Output Power | P _O | V _{DS} = 4.8 V I _{idle} = 800 mA (V _{GS} = adjust) f = 915 MHz, P _i = 26 dBmW Z _G = Z _L = 50 Ω | 35.5 | — | — | dBmW |
| Drain Efficiency | η _D | | — | 58.0 | — | % |
| Power Gain | G _P | | 9.5 | — | — | dB |
| Threshold Voltage | V _{th} | V _{DS} = 4.8 V, I _D = 0.5 mA | 0.30 | — | 1.30 | V |
| Drain Cut-off Current | I _{DSS} | V _{DS} = 10 V, V _{GS} = 0 V | — | — | 10 | μA |
| Gate-Source Leakage Current | I _{GSS} | V _{GS} = 5 V, V _{DS} = 0 V | — | — | 5 | μA |
| Load Mismatch | — | V _{DS} = 6.5 V, f = 915 MHz P _i = 26 dBmW P _O = 35.5 dBmW (V _{GS} = adjust) VSWR LOAD 10: 1 all phase | No Degradation | | | — |

CAUTION

This transistor is the electrostatic sensitive device.
Please handle with caution.

RF OUTPUT POWER TEST FIXTURE





CAUTION

These are only typical curves and devices are not necessarily guaranteed at these curves.