

# HIGH FREQUENCY DEVICES

## GAAs FIELD EFFECT TRANSISTORS

### SMALL SIGNAL FET'S



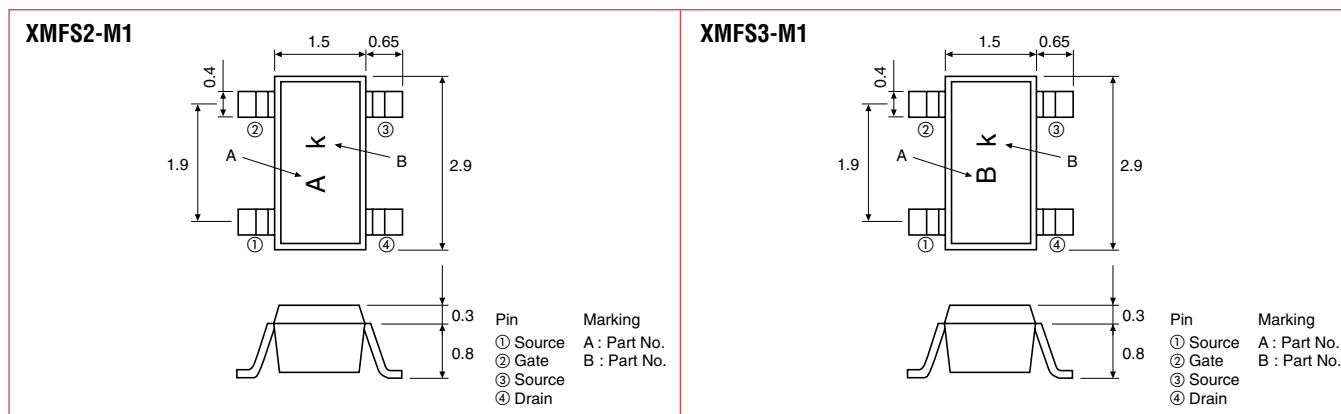
### FEATURES

- Low noise figure
- Excellent associated gain

### APPLICATIONS

- Low noise applications up to c-band 6GHz
- WLAN, WLL, DBS tuner/converter, GPS
- Low noise amplifiers or oscillator circuits

### DIMENSIONS: mm



### SPECIFICATIONS

|                        |      | V <sub>GSS</sub>                                | I <sub>LOSS</sub>                            | gm  | V <sub>GS (OFF)</sub>                        | Gas   | F <sub>min</sub> |
|------------------------|------|---|--|---|--|---|------------------|
| <b>Test Conditions</b> |      | I <sub>GS</sub> = -10μA<br>V <sub>DS</sub> = 0V | V <sub>DS</sub> = 3V<br>V <sub>GS</sub> = 0V | V <sub>DS</sub> = 3V<br>I <sub>D</sub> = 30mA | V <sub>DS</sub> = 3V<br>I <sub>D</sub> = 1mA | V <sub>DS</sub> = 3V<br>I <sub>D</sub> = 10mA |                  |
| <b>XMFS2-M1</b>        | Min. | —   | 60mA   | 40mS  | -5.0V  | —   | —                |
|                        | Typ. | —   | —  | 60mS  | —  | 12dB  | 0.4dB            |
|                        | Max. | -3V   | 100mA  | —   | -1.0V  | —   | —                |
| <b>Test Conditions</b> |      | I <sub>GS</sub> = -10μA<br>V <sub>DS</sub> = 0V | V <sub>DS</sub> = 3V<br>V <sub>GS</sub> = 0V | V <sub>DS</sub> = 3V<br>I <sub>D</sub> = 10mA | V <sub>DS</sub> = 3V<br>I <sub>D</sub> = 1mA | V <sub>DS</sub> = 3V<br>I <sub>D</sub> = 10mA |                  |
| <b>XMFS3-M1</b>        | Min. | —   | 15mA   | 30mS  | -3.0V  | —   | —                |
|                        | Typ. | —   | —  | 34mS  | —  | 15dB  | 0.4dB            |
|                        | Max. | -3V   | 60mA   | —   | -0.3V  | —   | —                |

T<sub>a</sub> = 25°C

For more detailed information regarding this product line, see Catalog No. 0-35-E, or see Murata Electronics' web page for .pdf files and S-parameters (www.murata.com).