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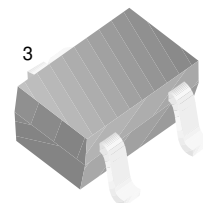
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



FJX597JB

Capacitor Microphone Applications

- Especially Suited for use in Audio, Telephone Capacitor Microphones
- Excellent Voltage Characteristic
- Excellent Transient Characteristic



1 SOT-323
Marking: SCB
1. Drain 2. Source 3. Gate

Si N-channel Junction FET

Absolute Maximum Ratings $T_a=25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Ratings | Units |
|-----------|----------------------|-----------|------------------|
| V_{GDO} | Gate-Drain Voltage | -20 | V |
| I_G | Gate Current | 10 | mA |
| I_D | Drain Current | 1 | mA |
| P_D | Power Dissipation | 100 | mW |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{STG} | Storage Temperature | -55 ~ 150 | $^\circ\text{C}$ |

Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Test Condition | Min. | Typ. | Max. | Units |
|---------------|------------------------------|---|------|------|------|---------------|
| BV_{GDO} | Gate-Drain Breakdown Voltage | $I_G = -100\mu\text{A}$ | -20 | | | V |
| $V_{GS(off)}$ | Gate-Source Cut-off Voltage | $V_{DS}=5\text{V}, I_D=1\mu\text{A}$ | | -0.6 | -1.5 | V |
| I_{DSS} | Drain Current | $V_{DS}=5\text{V}, V_{GS}=0$ | 150 | | 240 | μA |
| $ Y_{FS} $ | Forward Transfer Admittance | $V_{DS}=5\text{V}, V_{GS}=0, f=1\text{MHz}$ | 0.4 | 1.2 | | mS |
| C_{ISS} | Input Capacitance | $V_{DS}=5\text{V}, V_{GS}=0, f=1\text{MHz}$ | | 3.5 | | pF |
| C_{RSS} | Output Capacitance | $V_{DS}=5\text{V}, V_{GS}=0, f=1\text{MHz}$ | | 0.65 | | pF |

Typical Characteristics

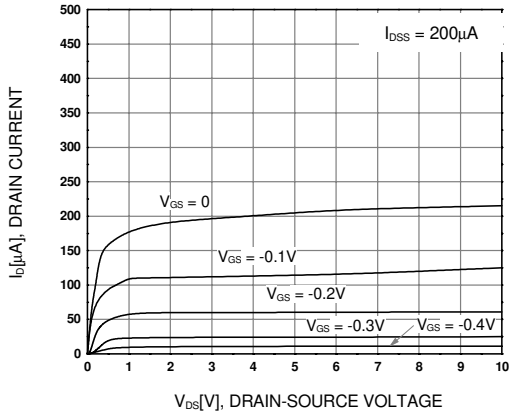


Figure 1. I_D - V_{DS}

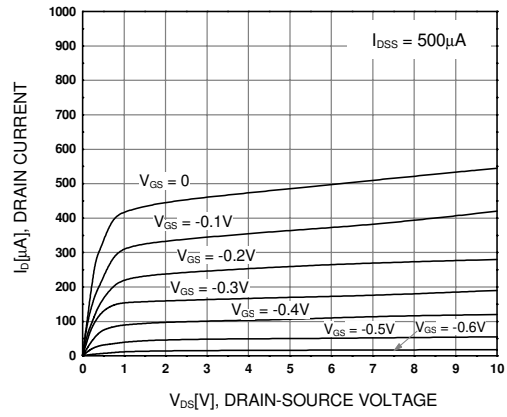


Figure 2. I_D - V_{DS}

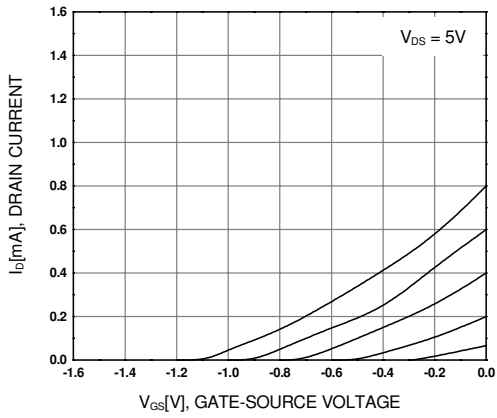


Figure 3. I_D - V_{GS}

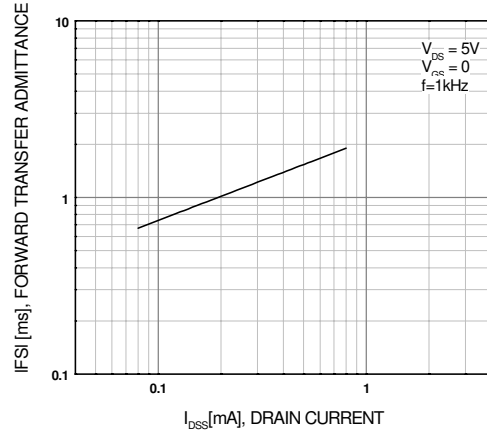


Figure 4. $|y_{FS}|$ - I_{DSS}

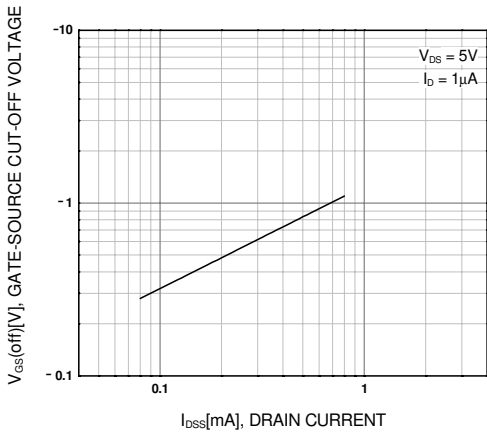


Figure 5. $V_{GS(off)}$ - I_{DSS}

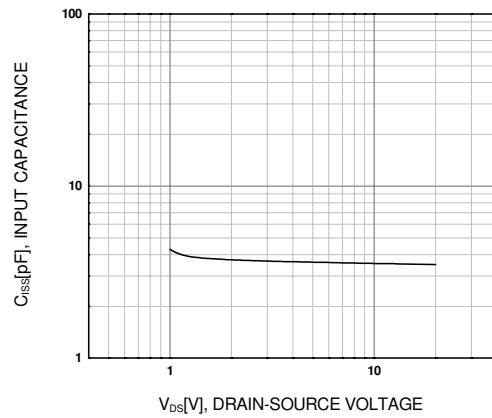


Figure 6. C_{iss} - V_{DS}

Typical Characteristics (Continued)

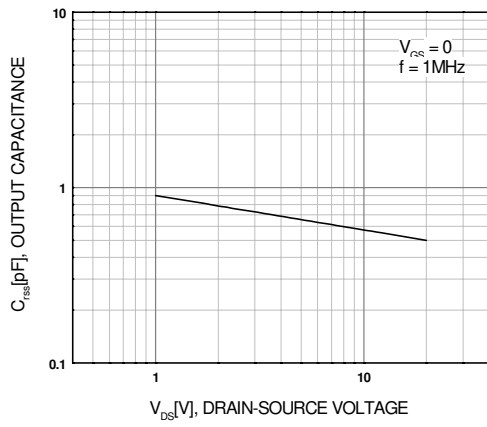


Figure 7. C_{RSS} - V_{DS}

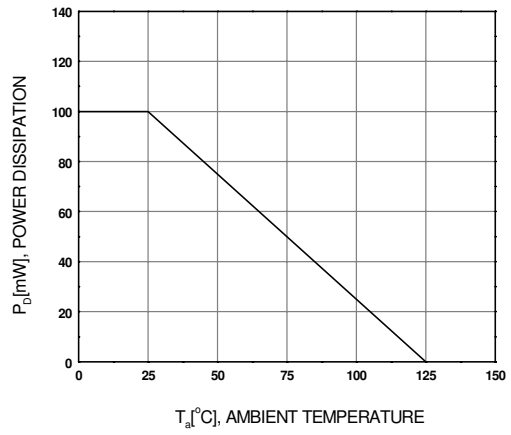
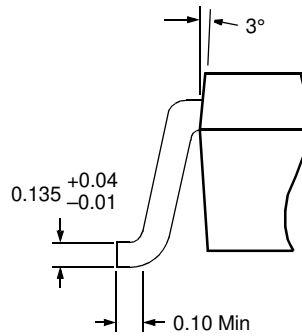
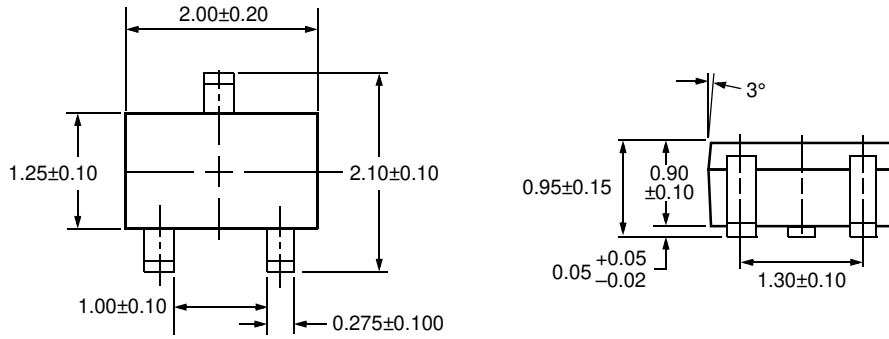


Figure 8. P_D - T_A

Package Dimensions

FJX597JB

SOT-323



Dimensions in Millimeters

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