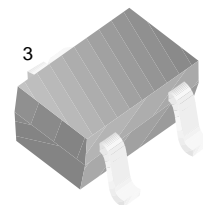


## FJX597JB

### 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	$\mu\text{A}$
$ 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

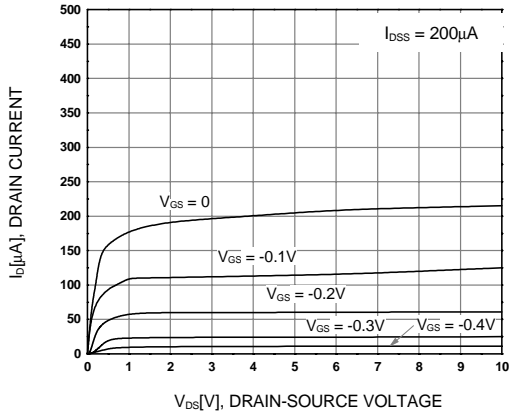


Figure 1.  $I_D$ - $V_{DS}$

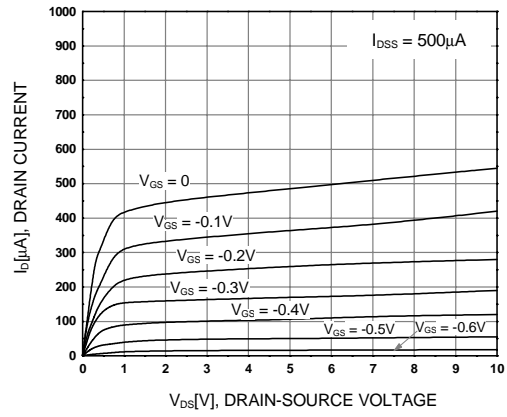


Figure 2.  $I_D$ - $V_{DS}$

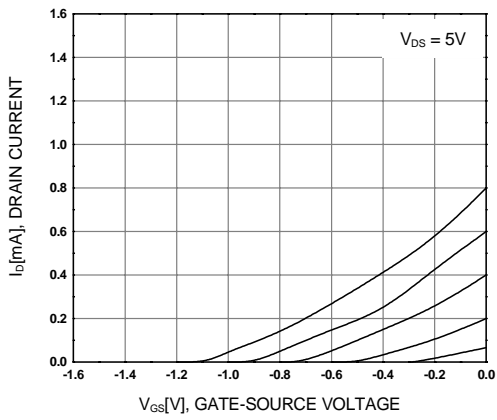


Figure 3.  $I_D$ - $V_{GS}$

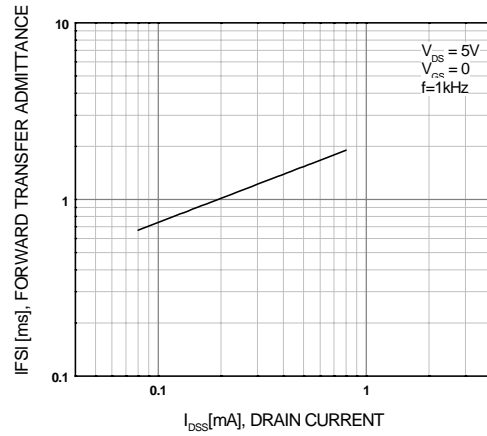


Figure 4.  $|y_{FS}|$ - $I_{DSS}$

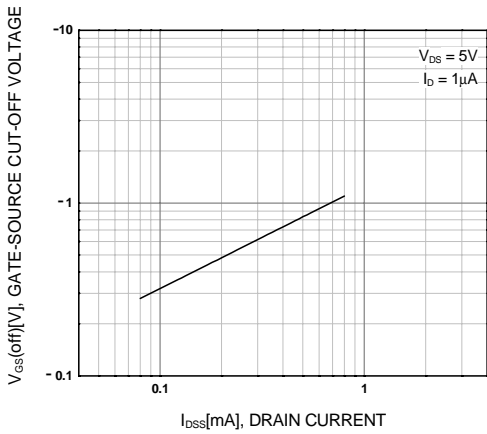


Figure 5.  $V_{GS(off)}$ - $I_{DSS}$

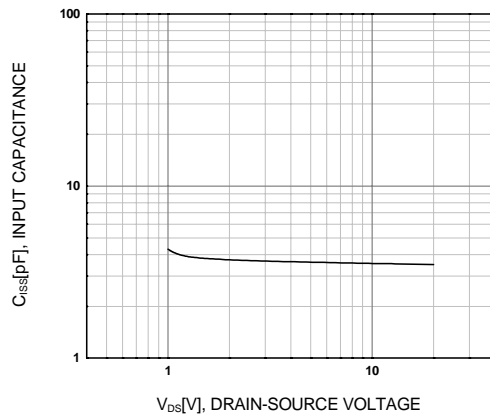


Figure 6.  $C_{iss}$ - $V_{DS}$

Typical Characteristics (Continued)

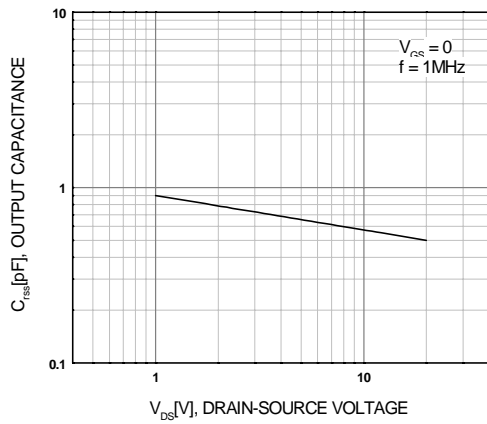


Figure 7.  $C_{RSS}$ - $V_{DS}$

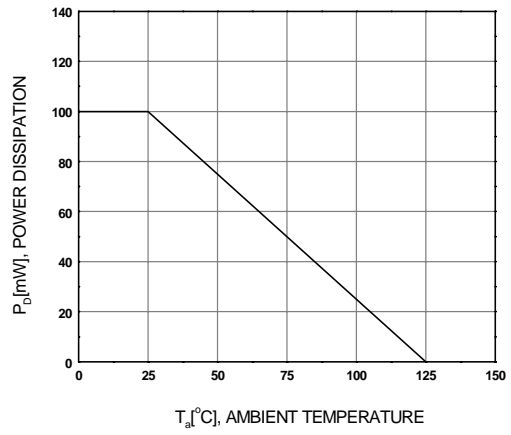
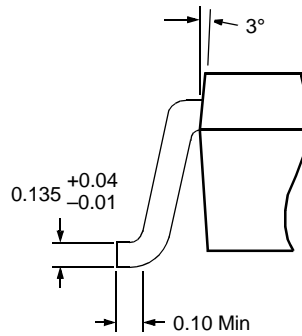
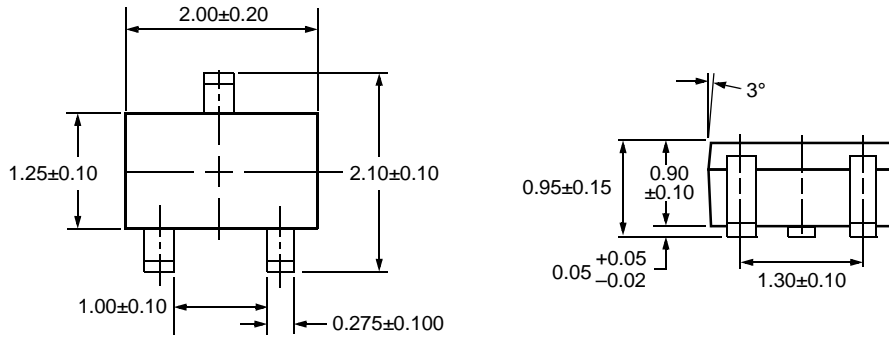


Figure 8.  $P_D$ - $T_A$

# Package Dimensions

FJX597JB

## SOT-323



Dimensions in Millimeters

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CROSSVOLT <sup>™</sup>	GlobalOptoisolator <sup>™</sup>	MicroPak <sup>™</sup>	QFET <sup>®</sup>	SuperSOT <sup>™</sup> -8
DO <sub>M</sub> E <sup>™</sup>	GTO <sup>™</sup>	MICROWIRE <sup>™</sup>	Q <sub>S</sub> <sup>™</sup>	SyncFET <sup>™</sup>
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E <sup>2</sup> C <sub>MOS</sub> <sup>™</sup>	I <sup>2</sup> C <sup>™</sup>	MSXPro <sup>™</sup>	Quiet Series <sup>™</sup>	TINYOPTO <sup>™</sup>
EnSigna <sup>™</sup>	<i>i-Lo</i> <sup>™</sup>	OCX <sup>™</sup>	RapidConfigure <sup>™</sup>	TruTranslation <sup>™</sup>
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