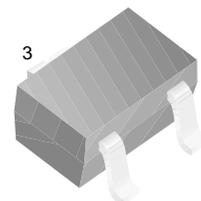


FJX597JC

Capacitor Microphone Applications

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



1 SOT-323
Marking: SCC
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	$V_{DS}=5\text{V}, V_{GS}=0$	210		350	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

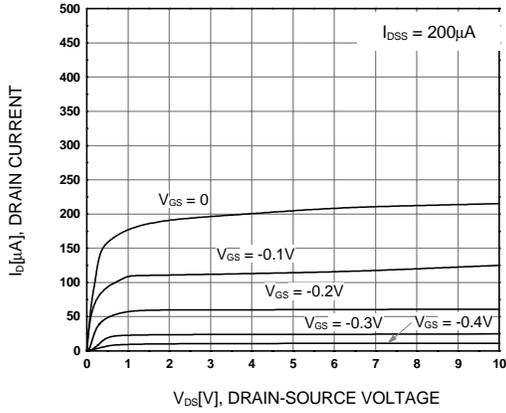


Figure 1. I_D - V_{DS}

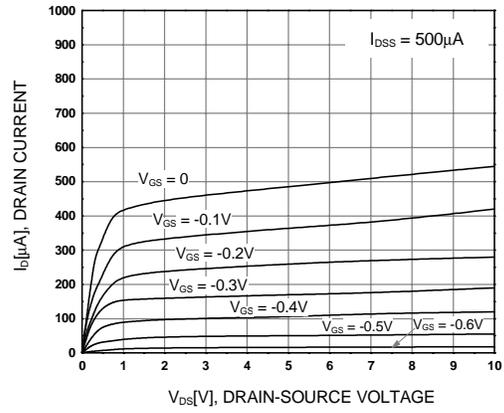


Figure 2. I_D - V_{DS}

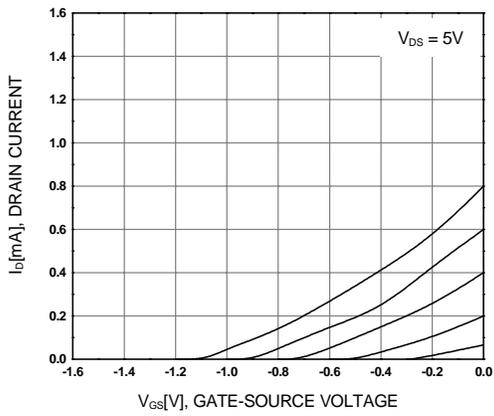


Figure 3. I_D - V_{GS}

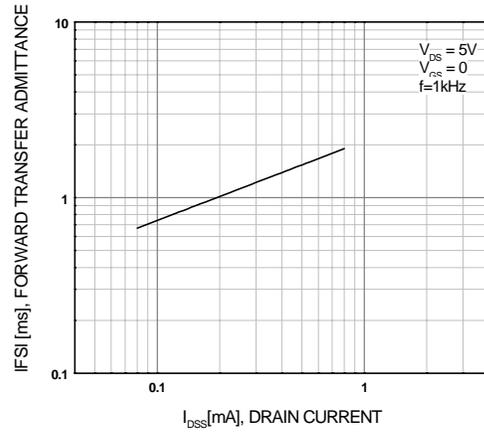


Figure 4. $|y_{FS}|$ - I_{DSS}

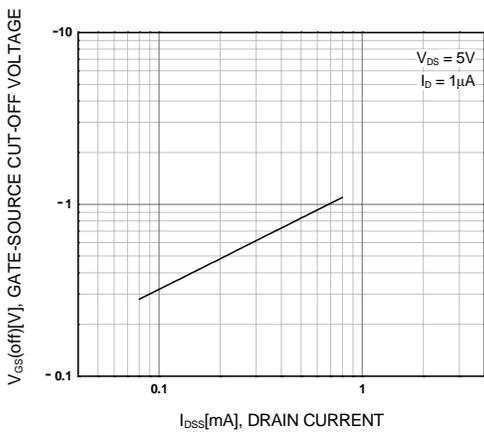


Figure 5. $V_{GS(off)}$ - I_{DSS}

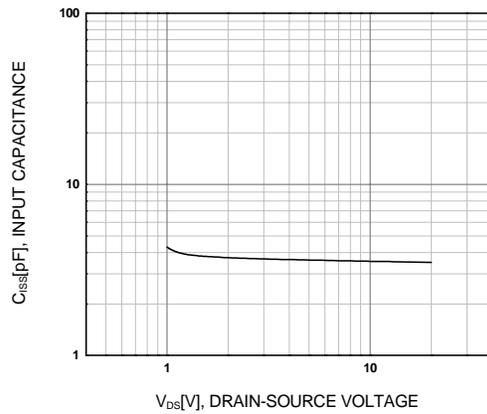


Figure 6. C_{iss} - V_{DS}

Typical Characteristics (Continued)

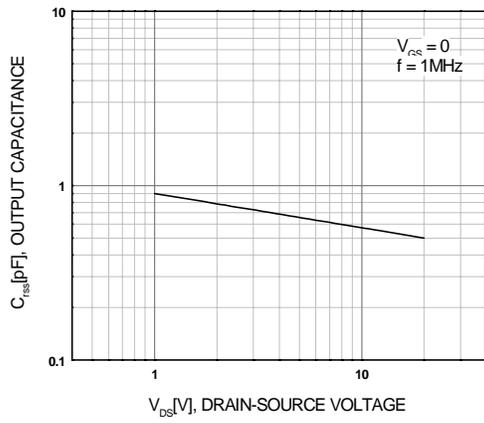


Figure 7. C_{RSS} - V_{DS}

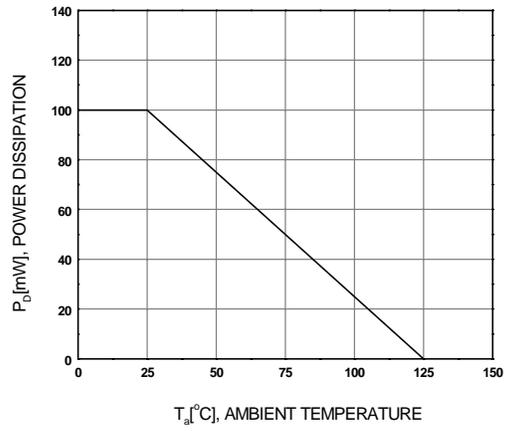
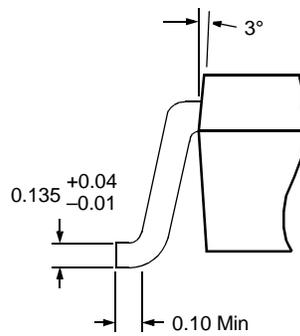
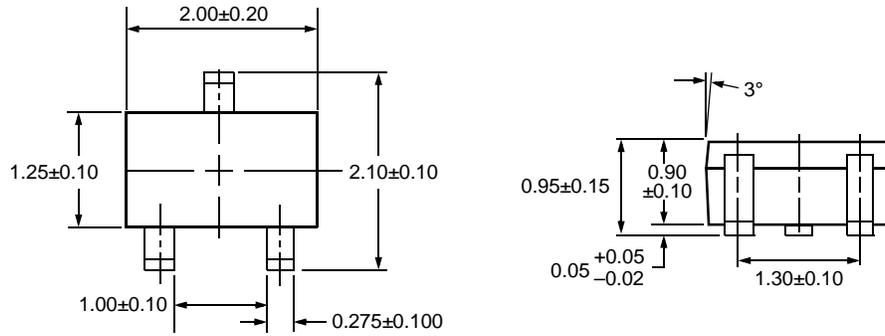


Figure 8. P_D - T_A

Package Dimensions

FJX597JC

SOT-323



Dimensions in Millimeters

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FJX597JC

Silicon N-Channel Junction FET

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Features

Capacitor Microphone Applications

- Especially Suited for use in Audio, Telephone Capacitor Microphones
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Product	Product status	Pb-free Status	Pricing*	Package type	Leads	Packing method	Package Marking Convention**
FJX597JCTF	Full Production	Full Production	\$0.077	SOT-323	3	TAPE REEL	Line 1: SCC

* Fairchild 1,000 piece Budgetary Pricing

** A sample button will appear if the part is available through Fairchild's on-line samples program. If there is no sample button, please contact a [Fairchild distributor](#) to obtain samples



Indicates product with Pb-free second-level interconnect. For more information [click here](#).

Package marking information for product FJX597JC is available. [Click here for more information](#).

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Models

Package & leads	Condition	Temperature range	Vcc range	Software version	Revision date
PSPICE					
SOT-323-3	Electrical	25°C	0V to 10V	OrCAD 10.3	Jul 9, 2007

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Qualification Support

Click on a product for detailed qualification data

Product
FJX597JCTE

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