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<u>Fairchild Semiconductor</u> <u>J271</u>

For any questions, you can email us directly: sales@integrated-circuit.com



Datasheet of J271 - JFET P-CH 30V 0.35W TO92 Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com



J271

P-Channel Switch

- This device is designed for low level analog switching sample and hold circuits and chopper stabilized amplifiers.
- · Sourced from process 88.



Rev. A, February 2004

Absolute Maximum Ratings* Ta=25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{DG}	Drain-Gate Voltage	30	V
V_{GS}	Gate-Source Voltage	30	V
GF	Forward Gate Current	50	mA
T _J , T _{STG}	Operating and Storage Junction Temperature Range	-55 ~ 150	°C

^{*} This ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Electrical Characteristics Ta=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
Off Charac	cteristics	·			
V _{(BR)GSS}	Gate-Source Breakdwon Voltage	$I_G = 1.0 \mu A, V_{DS} = 0$	30		V
I _{GSS}	Gate Reverse Current	V _{GS} = 20V, V _{DS} = 0		200	pА
V _{GS(off)}	Gate-Source Cutoff Voltage	$V_{DS} = -15V, I_{D} = 1.0nA$	1.5	4.5	V
On Characteristics					
I _{DSS}	Zero-Gate Voltage Drain Current *	V _{DS} = -15V, V _{GS} = 0	-6	-50	mA
Small Signal Characteristics					
gfs	Forward Transferconductance	$V_{GS} = 0V, V_{DS} = 15V, f = 1.0kHz$	8000	18000	μmhos
goss	Common- Source Output Conductance	$V_{GS} = 0V, V_{DS} = 15V, f = 1.0kHz$		200	μmhos

Thermal Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Max.	Units
P _D	Total Device Dissipation	350	mW
	Derate above 25°C	2.8	mW/°C
$R_{\theta JC}$	Thermal Resistance, Junction to Case	125	°C/W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	357	°C/W

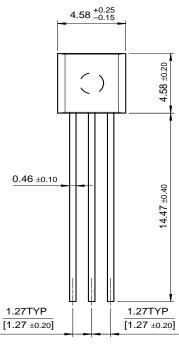
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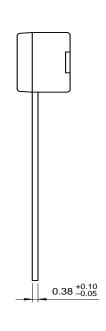
These rating are based on a maximum junction temperature of 150 degrees C.
These are steady limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

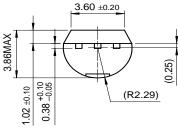


Package Dimensions









Dimensions in Millimeters

Distributor of Fairchild Semiconductor: Excellent Integrated System LimitedDatasheet of J271 - JFET P-CH 30V 0.35W TO92

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