# **Excellent Integrated System Limited**

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<u>Fairchild Semiconductor</u> <u>PN4303</u>

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# PN4303

# **N-Channel General Purpose Amplifier**

- This device is designed primarily for low level audio and general purpose applications with high impedance signal sources.
- · Sourced from process 52.



# Absolute Maximum Ratings\* T<sub>a</sub>=25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
$V_{DG}$	Drain-Gate Voltage	30	V
V <sub>GS</sub>	Gate-Source Voltage	-30	V
Forward Gate Current		50	mA
T <sub>J</sub> , T <sub>STG</sub>	Operating and Storage Junction Temperature Range	-55 ~ 150	°C

<sup>\*</sup> 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 Characteristics					
V <sub>(BR)GSS</sub>	Gate-Source Breakdwon Voltage	$I_G = -1.0 \mu A, V_{DS} = 0$	-30		V
I <sub>GSS</sub>	Gate Reverse Current	$V_{GS} = -10V, V_{DS} = 0$		-1.0	nA
V <sub>GS(off)</sub>	Gate-Source Cutoff Voltage	V <sub>DS</sub> = 20V, I <sub>D</sub> = 1.0nA		-6.0	V
On Characteristics					
I <sub>DSS</sub>	Zero-Gate Voltage Drain Current *	$V_{DS} = -15V, V_{GS} = 0$	4.0	10	mA

### Thermal Characteristics T<sub>a</sub>=25°C unless otherwise noted

Symbol	Parameter	Max.	Units
P <sub>D</sub> Total Device Dissipation		625	mW
	Derate above 25°C	5.0	mW/°C
$R_{\theta JC}$	Thermal Resistance, Junction to Case	125	°C/W
R <sub>θJA</sub> Thermal Resistance, Junction to Ambient		357	°C/W

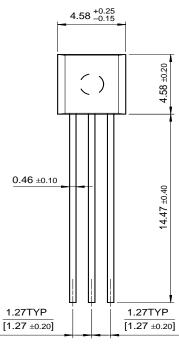
©2004 Fairchild Semiconductor Corporation Rev. A, April 2004

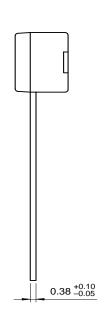
These rating are based on a maximum junction temperature of 150 degrees C.
These are steady limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

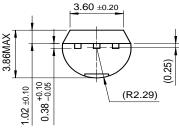


# **Package Dimensions**









Dimensions in Millimeters



# Distributor of Fairchild Semiconductor: Excellent Integrated System Limited Datasheet of PN4303 - JFET N-CH 30V 625MW TO92

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EnSigna™	I <sup>2</sup> C <sup>TM</sup>	MSXPro™	Quiet Series™	TINYOPTO™
FACT™	<i>i-</i> Lo <sup>™</sup>	$OCX^{TM}$	RapidConfigure™	TruTranslation™
Across the board	d. Around the world.™	OCXPro <sup>™</sup>	RapidConnect™	UHC™
The Power France		OPTOLOGIC®	SILENT SWITCHER®	UltraFET®
Programmable A		OPTOPLANAR™	SMART START™	VCX <sup>TM</sup>
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### **Definition of Terms**

Datasheet Identification	Product Status	Definition
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