

# 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.



### 1. Drain 2. Source 3. Gate

# **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
I <sub>GF</sub>	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.

- 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.

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

Parameter	Test Condition	Min.	Max.	Units
Off Characteristics				
Gate-Source Breakdwon Voltage	$I_G = -1.0 \mu A, V_{DS} = 0$	-30		V
Gate Reverse Current	$V_{GS} = -10V, V_{DS} = 0$		-1.0	nA
Gate-Source Cutoff Voltage	V <sub>DS</sub> = 20V, I <sub>D</sub> = 1.0nA		-6.0	V
On Characteristics				
Zero-Gate Voltage Drain Current *	$V_{DS} = -15V, V_{GS} = 0$	4.0	10	mA
	teristics Gate-Source Breakdwon Voltage Gate Reverse Current Gate-Source Cutoff Voltage teristics	teristics  Gate-Source Breakdwon Voltage $I_G = -1.0\mu A, V_{DS} = 0$ Gate Reverse Current $V_{GS} = -10V, V_{DS} = 0$ Gate-Source Cutoff Voltage $V_{DS} = 20V, I_D = 1.0nA$ teristics	teristics  Gate-Source Breakdwon Voltage $I_G = -1.0\mu A, V_{DS} = 0$ -30  Gate Reverse Current $V_{GS} = -10V, V_{DS} = 0$ Gate-Source Cutoff Voltage $V_{DS} = 20V, I_D = 1.0nA$ teristics	

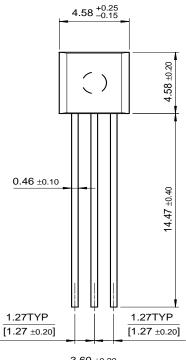
# Thermal Characteristics T<sub>a</sub>=25°C unless otherwise noted

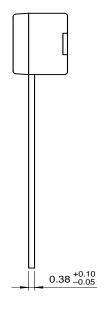
Symbol	Parameter	Max.	Units
P <sub>D</sub>	Total Device Dissipation	625	mW
	Derate above 25°C	5.0	mW/°C
$R_{\theta JC}$	Thermal Resistance, Junction to Case	125	°C/W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	357	°C/W

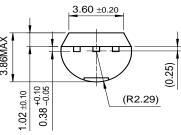
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# **Package Dimensions**

TO-92







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