

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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PN4302

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_a =25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{DG}	Drain-Gate Voltage	30	V
V _{GS}	Gate-Source Voltage	-30	V
I _{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 T_a =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	$V_{DS} = 20V, I_{D} = 1.0nA$		-4.0	V
On Characteristics				
Zero-Gate Voltage Drain Current *	$V_{DS} = -15V, V_{GS} = 0$	0.5	5.0	mA
	Gate-Source Breakdwon Voltage Gate Reverse Current Gate-Source Cutoff Voltage eristics			

Thermal Characteristics T_a=25°C unless otherwise noted

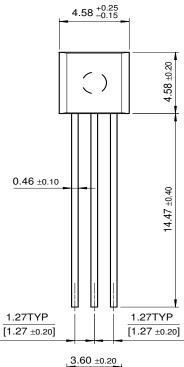
Symbol	Parameter	Max.	Units
P _D	Total Device Dissipation	625	mW
	Derate above 25°C	5.0	mW/°C
$R_{\theta JC}$	Thermal Resistance, Junction to Case	125	°C/W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	357	°C/W

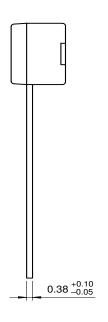
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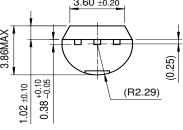
These rating are based on a maximum junction temperature of 150 degrees C.
 These are steady limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Package Dimensions

TO-92







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CoolFET™	FPS™	$MICROCOUPLER^{TM}$	PowerSaver™	SuperSOT™-3
CROSSVOLT™	FRFET™	MicroFET™	PowerTrench®	SuperSOT™-6
DOME™	GlobalOptoisolator™	MicroPak™	QFET®	SuperSOT™-8
EcoSPARK™	GTO™ .	MICROWIRE™	QSTM	SyncFET™
E ² CMOS TM	HiSeC™	MSX TM	QT Optoelectronics™	TinyLogic [®]
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FACT™	i-Lo™	OCX TM	RapidConfigure™	TruTranslation™
Across the board	d. Around the world.™	OCXPro™	RapidConnect™	UHC™
The Power France		OPTOLOGIC®	SILENT SWITCHER®	UltraFET®
Programmable A		OPTOPLANAR™	SMART START™	VCX TM

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Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
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