imall

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.

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FAIRCHILD

SEMICONDUCTOR®

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.



1. Drain 2. Gate 3. Source

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.

NOTES:

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

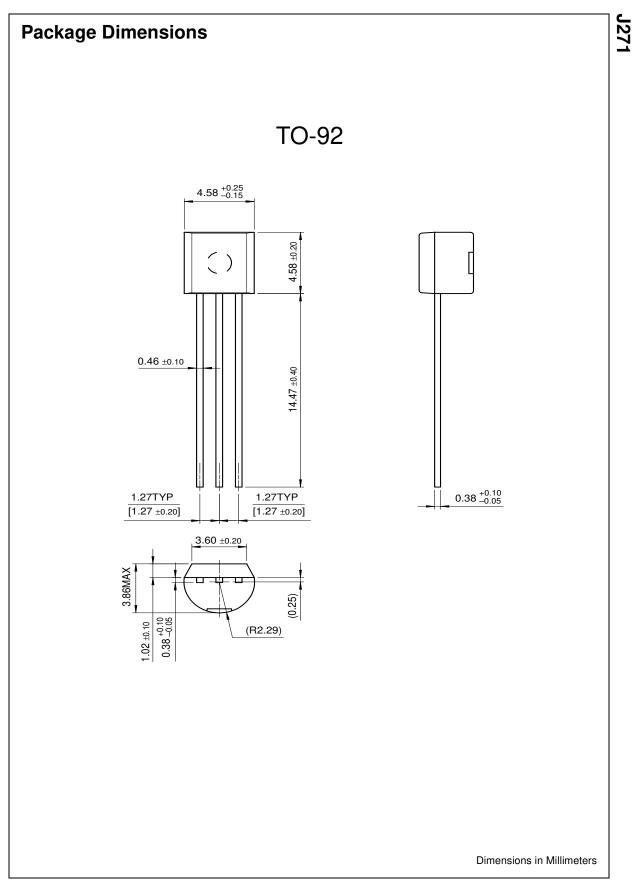
Electrical Characteristics Ta=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
Off Charac	teristics				
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
PD	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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J271
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CoolFET™	FPS™	MicroFET™	QFET [®]	SuperSOT™-8
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DOME™	GlobalOptoisolator™	MICROWIRE™	QT Optoelectronics [™]	TinyLogic [®]
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E ² CMOS™	HiSeC™	MSXPro™	RapidConfigure™	TruTranslation™
EnSigna™	I ² C™	OCX™	RapidConnect™	UHC™
FACT™	ImpliedDisconnect [™]	OCXPro™	SILENT SWITCHER [®]	UltraFET [®]
Across the board	. Around the world.™	OPTOLOGIC [®]	SMART START™	VCX™
The Power Franc	hise™	OPTOPLANAR™	SPM™	
Programmable A	ctive Droop™	PACMAN™	Stealth™	

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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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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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