J270

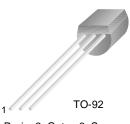


SEMICONDUCTOR®

J270

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* Ta=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.

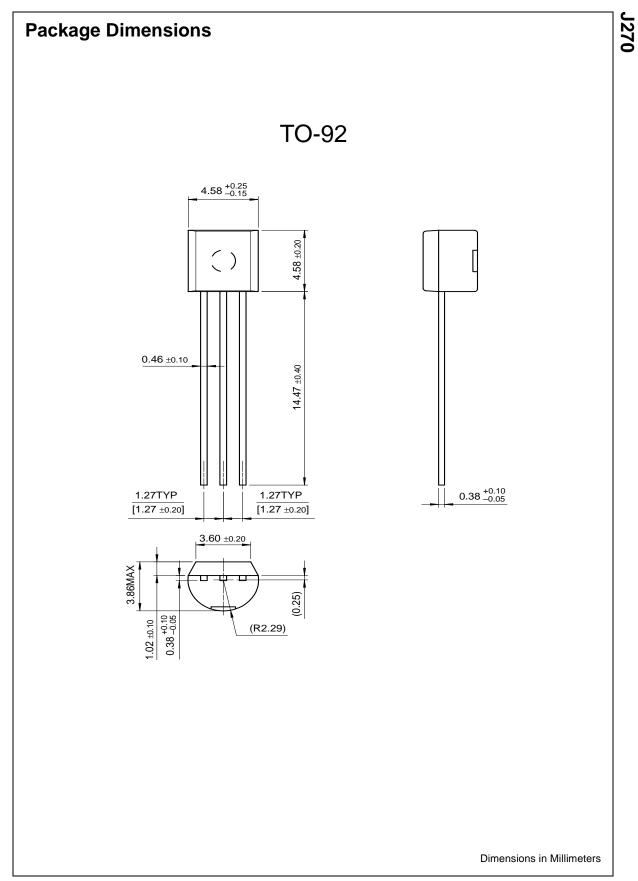
Electrical Characteristics T_a=25°C unless otherwise noted

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	0.5	2.0	V
On Charac	teristics				
I _{DSS}	Zero-Gate Voltage Drain Current *	$V_{DS} = -15V, V_{GS} = 0$	-2.0	-15	mA
Small Sigr	al Characteristics	·		•	•
gfs	Forward Transferconductance	$V_{GS} = 0V, V_{DS} = 15V, f = 1.0kHz$	6000	15000	μmhos
goss	Common- Source Output Conductance	$V_{GS} = 0V, V_{DS} = 15V, f = 1.0 \text{kHz}$		200	μmhos

Thermal Characteristics $T_{A}\text{=}25^{\circ}\text{C}$ 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
$R_{ extsf{ heta}JA}$	Thermal Resistance, Junction to Ambient	357	°C/W

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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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