

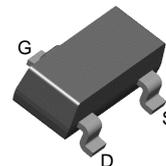


MMBFJ271

P-Channel Switch

Features

- This device is designed for low level analog switching sample and hold circuits and chopper stabilized amplifiers.
- Sourced from process 88.



SOT-23
Mark : 62T

Absolute Maximum Ratings * $T_a = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	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	$^\circ\text{C}$

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

- These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations

Thermal Characteristics

Symbol	Parameter	Value	Units
P_D	Total Device Dissipation	225	mW
	Derate above 25°C	1.8	$\text{mW}/^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	556	$^\circ\text{C}/\text{W}$

Note2 : Device mounted on FR-4 PCB, 1 inch x 0.85 inch x 0.062 inch

Electrical Characteristics $T_C = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	MIN	MAX	Units
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Off Characteristics (Note3)

$V_{(BR)GSS}$	Gate-Source Breakdown Voltage	$I_G = 1.0\mu\text{A}, V_{DS} = 0$	30		V
I_{GSS}	Gate Reverse Current	$V_{GS} = 20\text{V}, V_{DS} = 0$		200	μA
$V_{GS(off)}$	Gate-Source Cutoff Voltage	$V_{DS} = -15\text{V}, I_D = -1.0\text{nA}$	1.5	4.5	V

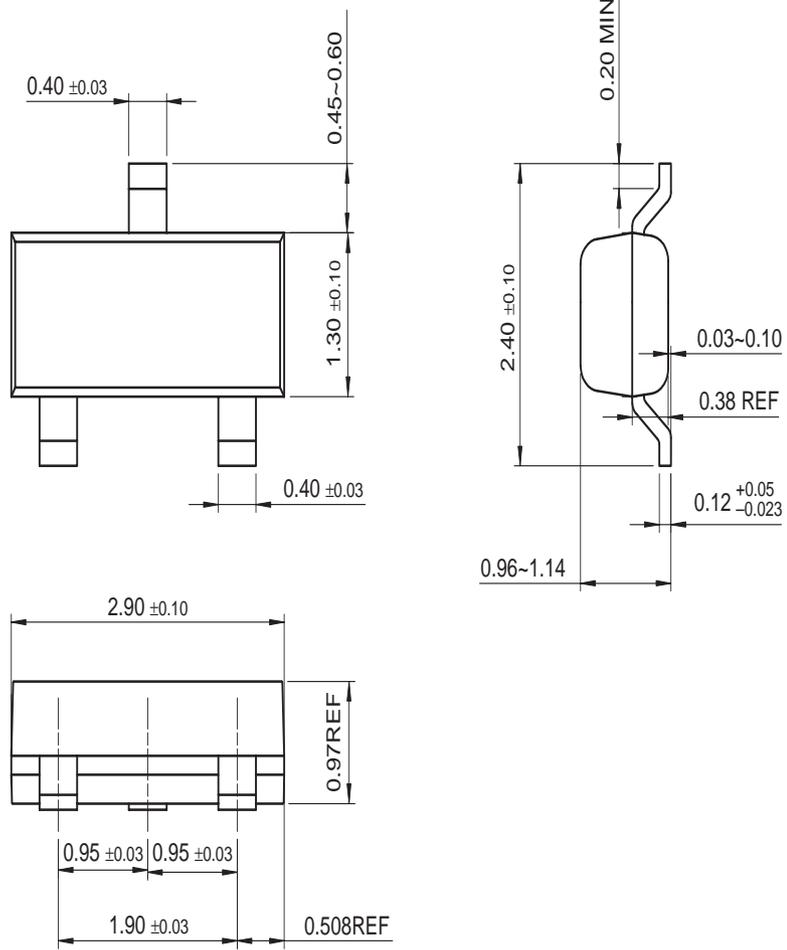
On Characteristics (Note3)

I_{DSS}	Zero-Gate Voltage Drain Current *	$V_{DS} = -15\text{V}, V_{GS} = 0$	-6.0	-50	mA
gfs	Forward Transferconductance	$V_{GS} = 0\text{V}, V_{DS} = 15\text{V}, f = 1.0\text{kHz}$	8000	18000	μmhos
goss	Common- Source Output Conductance	$V_{GS} = 0\text{V}, V_{DS} = 15\text{V}, f = 1.0\text{kHz}$		500	μmhos

Note3 : Short duration test pulse used to minimize self-heating effect.

Package Dimensions

SOT-23



Dimensions in Millimeters

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