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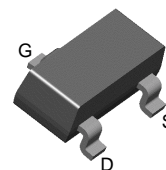


# MMBFJ271

## 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 $25^\circ\text{C}$	1.8	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	$\mu\text{A}$
$V_{GS(off)}$	Gate-Source Cutoff Voltage	$V_{DS} = -15\text{V}, I_D = -1.0\text{nA}$	1.5	4.5	V

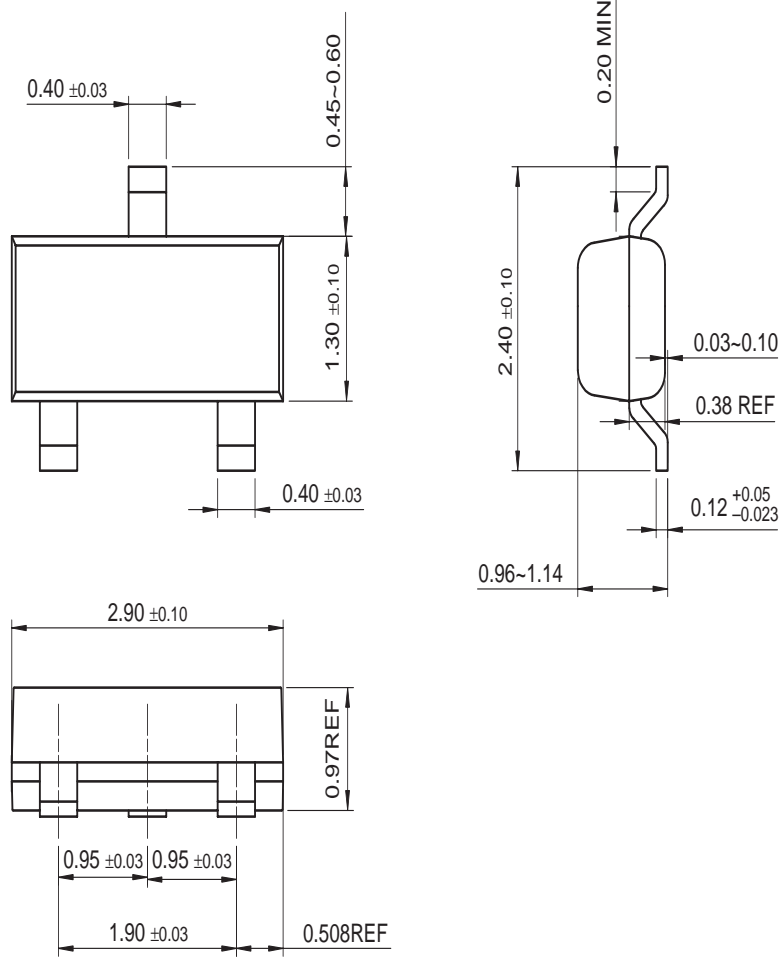
#### On Characteristics (Note3)

$I_{DSS}$	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	$\mu\text{mhos}$
goss	Common- Source Output Conductance	$V_{GS} = 0\text{V}, V_{DS} = 15\text{V}, f = 1.0\text{kHz}$		500	$\mu\text{mhos}$

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

# Package Dimensions

## SOT-23



Dimensions in Millimeters

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Rev. 119

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