

# **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.



June 2006

SOT-23 Mark : 62T

### Absolute Maximum Ratings \* T<sub>a</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>DG</sub>	Drain-Gate Voltage	-30	V
V <sub>GS</sub>	Gate-Source Voltage	30	V
I <sub>GF</sub>	Forward Gate Current	50	mA
T <sub>J</sub> , T <sub>STG</sub>	Operating and Storage Junction Temperature Range	-55 ~ 150	٦°

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

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

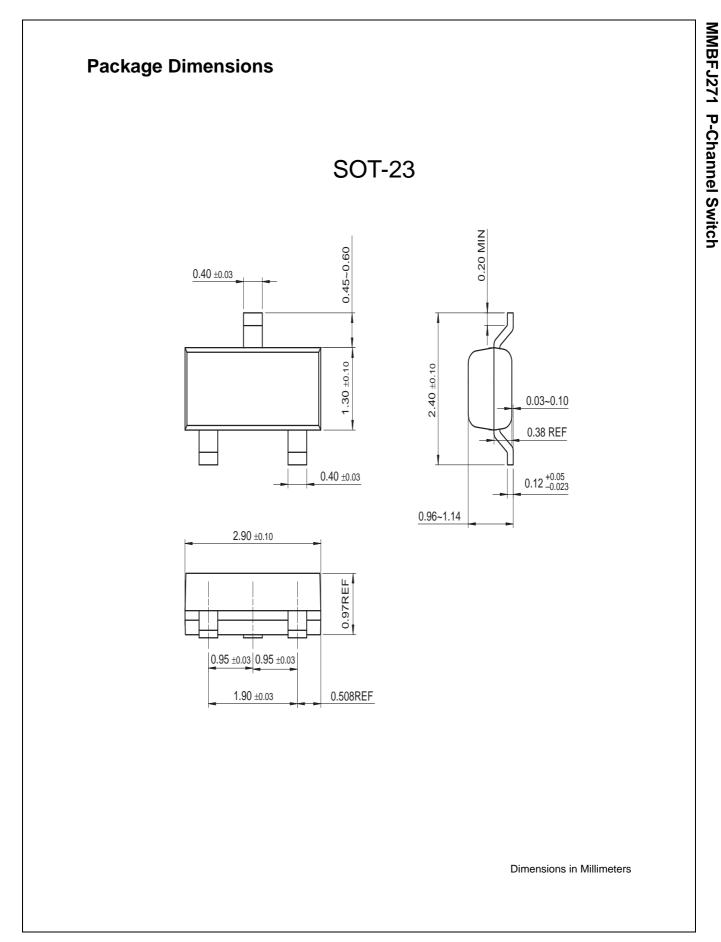
## **Thermal Characteristics**

Symbol	Parameter	Value	Units
P <sub>D</sub>	Total Device Dissipation Derate above 25°C	225 1.8	mW mW/°C
$R_{ hetaJA}$	Thermal Resistance, Junction to Ambient	556	°C/W

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

### Electrical Characteristics T<sub>c</sub> = 25°C unless otherwise noted

Symbol	Parameter	Test Condition	MIN	MAX	Units
Off Charac	teristics (Note3)				
V <sub>(BR)GSS</sub>	Gate-Source Breakdwon Voltage	$I_{G} = 1.0 \mu A, V_{DS} = 0$	30		V
I <sub>GSS</sub>	Gate Reverse Current	$V_{GS} = 20V, V_{DS} = 0$		200	pА
V <sub>GS(off)</sub>	Gate-Source Cutoff Voltage	V <sub>DS</sub> = -15V, I <sub>D</sub> = -1.0nA	1.5	4.5	V
On Charac	teristics (Note3)				
I <sub>DSS</sub>	Zero-Gate Voltage Drain Current *	$V_{DS} = -15V, V_{GS} = 0$	-6.0	-50	mA
gfs	Forward Transferconductance	$V_{GS} = 0V, V_{DS} = 15V, f = 1.0kHz$	8000	18000	μmhos
goss	Common- Source Output Conduc- tance	V <sub>GS</sub> = 0V, V <sub>DS</sub> = 15V, f = 1.0kHz		500	μmhos
Note3 : Short durat	tion test pulse used to minimize self-heating effect	•			



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Definition of Terms	

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Rev 119