



MMBFJ270

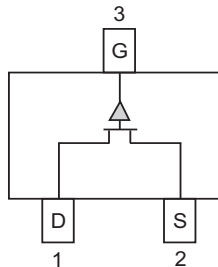
P-CHANNEL SWITCH

FEATURES

- This device is designed for low level analog switching sample and hold circuits and chopper stabilized amplifiers
- In compliance with EU RoHS 2002/95/EC directives

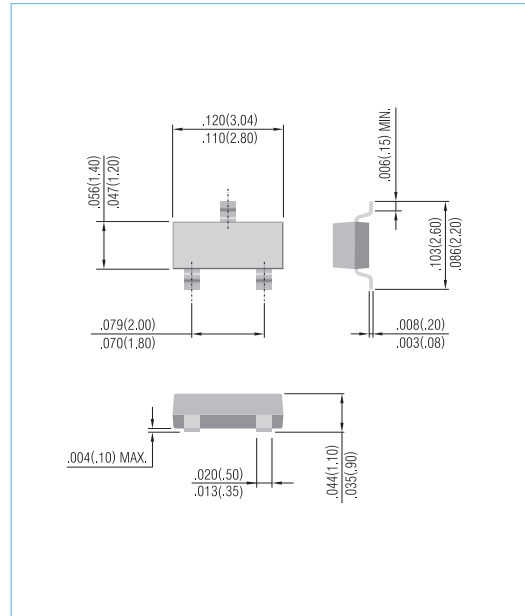
MECHANICAL DATA

- Case: SOT-23, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.008gram
- Marking : 270



SOT-23

Unit: inch (mm)



ABSOLUTE MAXIMUM RATINGS T_J=25°C

PARAMETER	SYMBOL	VALUE	UNITS
Drain-Gate Voltage	V _{DG}	-30	V
Gate-Source Voltage	V _{GS}	30	V
Forward Gate Current	I _{GF}	50	mA
Operating and Storage Junction Temperature Range	T _J ,T _{STG}	-55 to +150	°C

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	VALUE	UNITS
Total Device Dissipation Derate above 25°C	P _D	225 1.8	mW mW/°C
Thermal Resistance, Junction to Ambient (Note 1)	R _{θJA}	556	°C/W

Note 1 : Device mounted on FR-4 PCB, 70 x 60 x 1mm.

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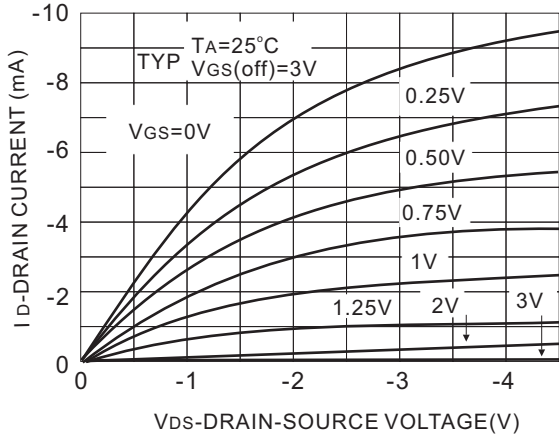
ELECTRICAL CHARACTERISTICS $T_J=25^{\circ}\text{C}$

PARAMETER	SYMBOL	TEST CONDITION	MIN.	MAX.	UNITS
Off Characteristics					
Gate-Source Breakdown Voltage	$V_{(BR)GSS}$	$I_G=1.0\mu\text{A}, V_{DS}=0$	30	-	V
Gate Reverse Current	I_{GSS}	$V_{GS}=20\text{V}, V_{DS}=0$	-	200	pA
Gate-Source Cutoff Voltage	$V_{GS(OFF)}$	$V_{DS}=-15\text{V}, I_D=-1.0\text{nA}$	0.5	2.0	V
On Characteristics					
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS}=-15\text{V}, V_{GS}=0$	-2.0	-15	mA
Forward Transferconductance	gfs	$V_{GS}=0\text{V}, V_{DS}=15\text{V}, f=1.0\text{kHz}$	6000	15000	μmhos

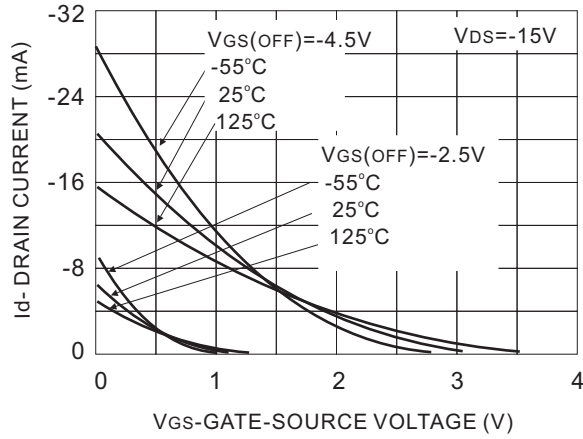


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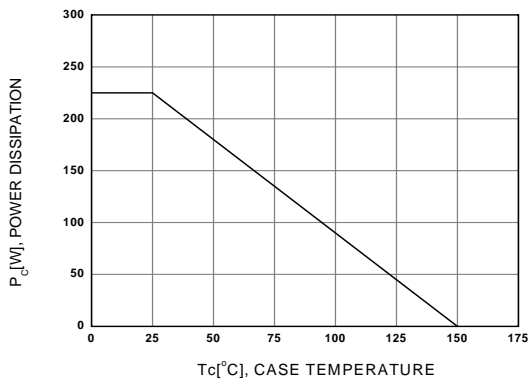
Common Drain-Source



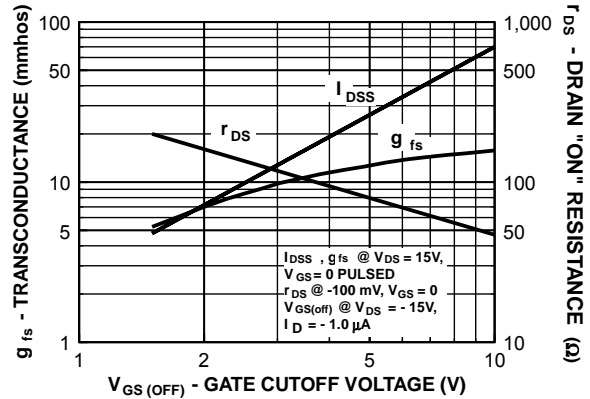
Transfer Characteristics



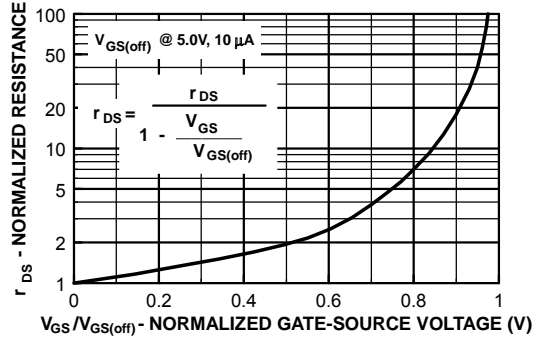
Power Derating



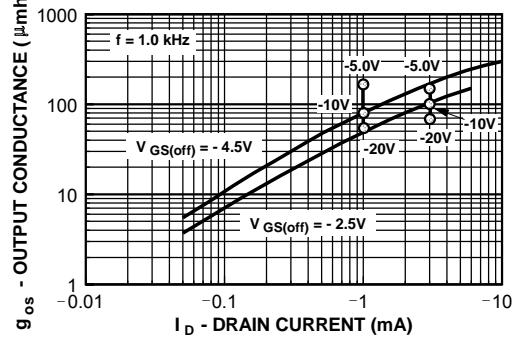
Parameter Interactions



Normalized Drain Resistance vs Bias Voltage



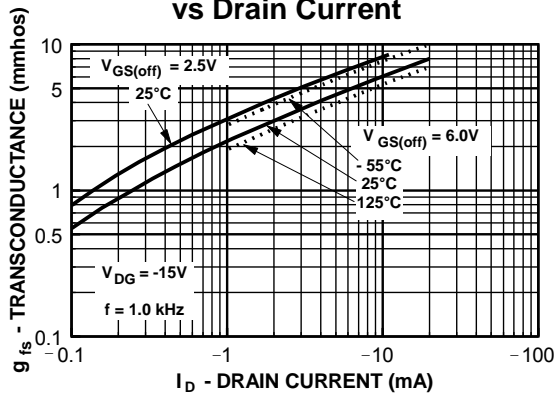
Output Conductance vs Drain Current



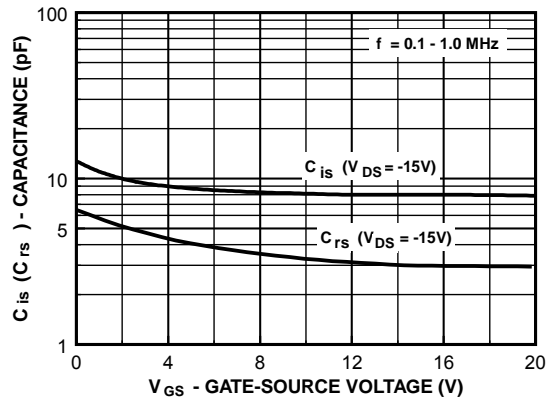


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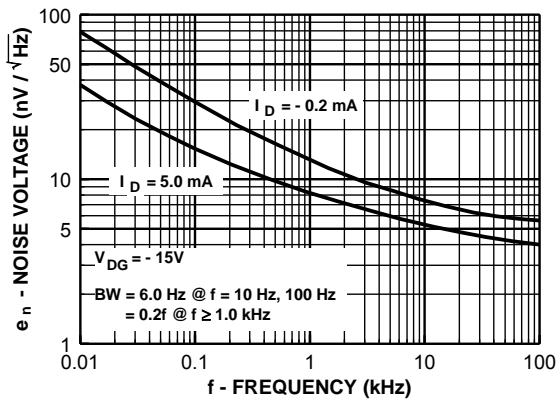
Transconductance vs Drain Current



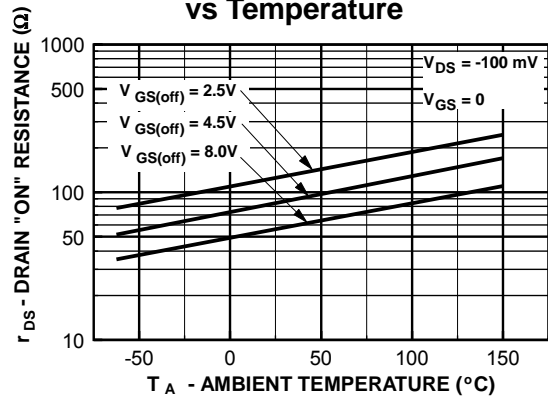
Capacitance vs Voltage



Noise Voltage vs Frequency



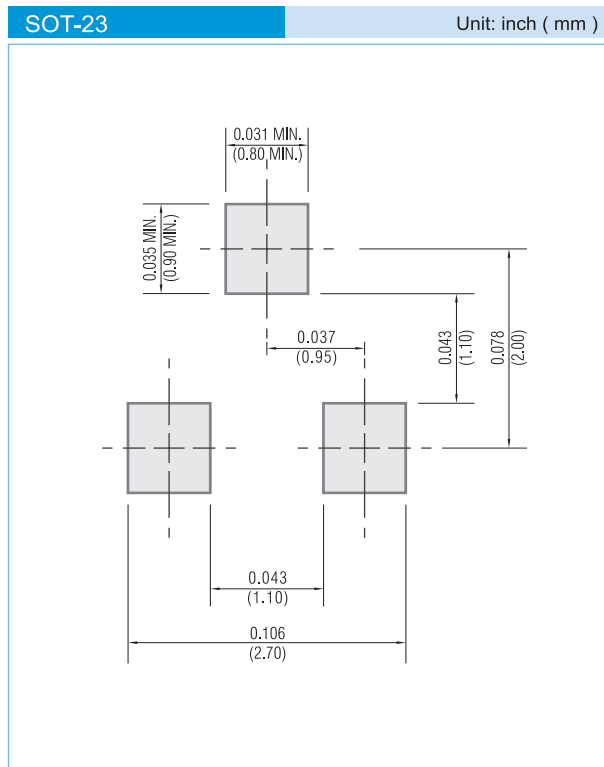
Channel Resistance vs Temperature





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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel

LEGAL STATEMENT

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