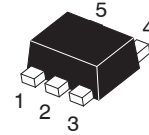


N-Channel JFET

15 V, 10 to 32 mA, 35 mS, Dual MCPH5



- 1: Drain 1
- 2: Source 1 / Source 2
- 3: Drain 2
- 4: Gate 2
- 5: Gate 1

MCH5908

SC-88AFL/ MCPH5
CASE 419AP

Features

- Composite Type with 2 J-FET Contained in a MCPH5 Package Currently in Use, Improving the Mounting Efficiency Greatly
- The MCH5908 is Formed with Two Chips, Being Equivalent to the 2SK3557, Placed in One Package
- This is a Pb-Free Device

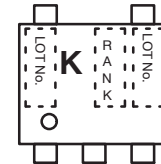
Specifications

ABSOLUTE MAXIMUM RATINGS (T_A = 25°C)

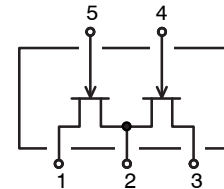
Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSX}		15	V
Gate-to-Drain Voltage	V _{GDS}		-15	V
Gate Current	I _G		10	mA
Drain Current	I _D		50	mA
Allowable Power Dissipation	P _D	1 unit	200	mW
Total Power Dissipation	P _T		300	mW
Junction Temperature	T _j		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

MARKING DIAGRAM



ELECTRICAL CONNECTION



ORDERING INFORMATION

Device	Package	Shipping†
MCH5908H-TL-E	SC-88AFL/ MCPH5 (Pb-Free)	3000 / Tape & Reel

†For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, [BRD8011/D](#).

ELECTRICAL CHARACTERISTICS (T_A = 25°C)

Parameter	Symbol	Conditions	Ratings			Unit
			Min	Typ	Max	
Gate-to-Drain Breakdown Voltage	V _{(BR)GDS}	I _G = -10 μA, V _{DS} = 0 V	-15	-	-	V
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} = -10 V, V _{DS} = 0 V	-	-	-1.0	nA
Cutoff Voltage	V _{GS(off)}	V _{DS} = 5 V, I _D = 100 μA	-0.3	-0.7	-1.5	V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} = 5 V, V _{GS} = 0 V	10.0*	-	32.0*	mA
Forward Transfer Admittance	y _{fs}	V _{DS} = 5 V, V _{GS} = 0 V, f = 1 kHz	24	35	-	mS
Input Capacitance	C _{iss}	V _{DS} = 5 V, V _{GS} = 0 V, f = 1 MHz	-	10.5	-	pF
Reverse Transfer Capacitance	C _{rss}		-	3.5	-	pF
Noise Figure	NF	V _{DS} = 5 V, R _g = 1 kΩ, I _D = 1 mA, f = 1 kHz	-	1.0	-	dB

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

*The MCH5908 is classified by I_{DSS} as follows (unit: mA).

Rank	G	H
I _{DSS}	10 to 20	16 to 32

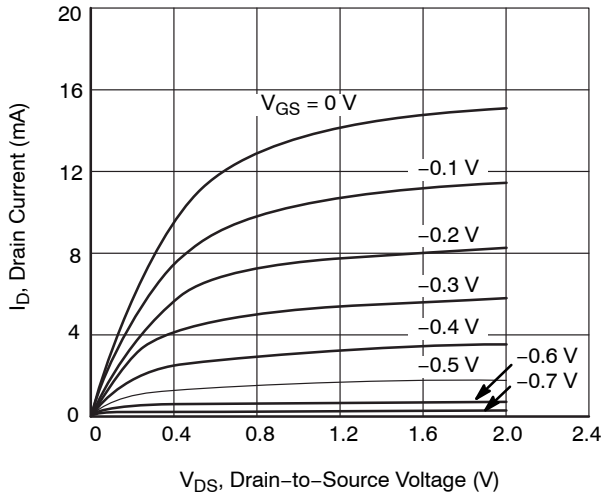


Figure 1. $I_D - V_{DS}$

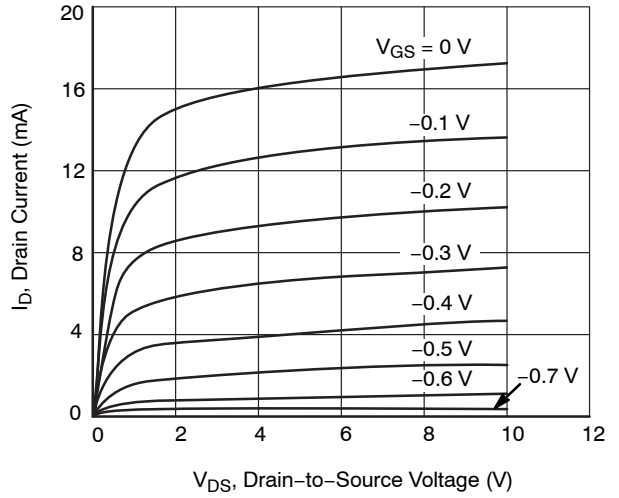


Figure 2. $I_D - V_{DS}$

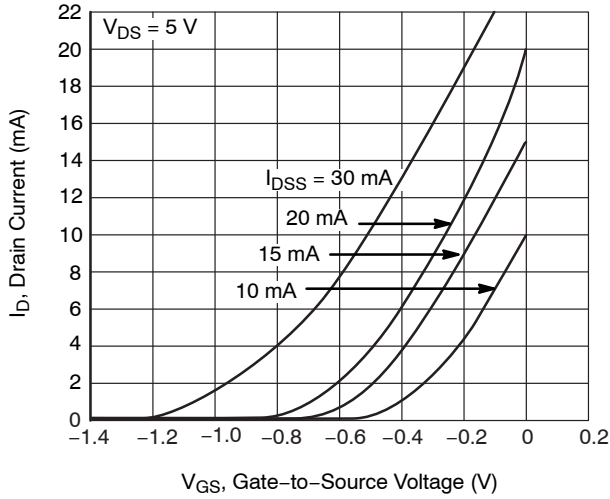


Figure 3. $I_D - V_{GS}$

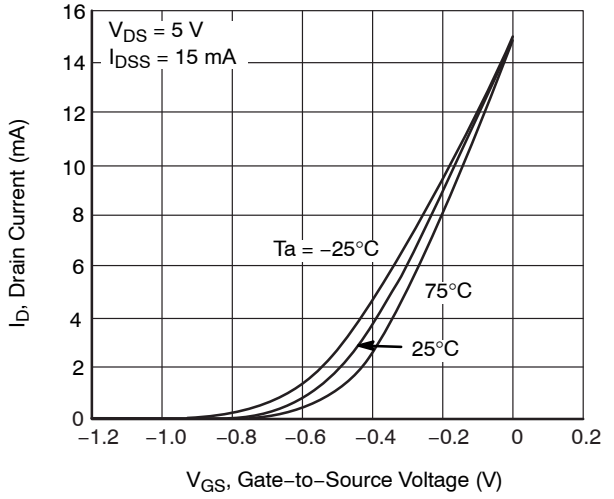


Figure 4. $I_D - V_{GS}$

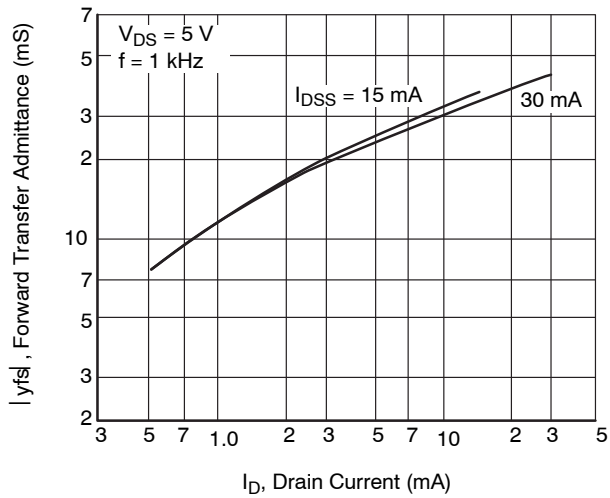


Figure 5. $|y_{fs}| - I_D$

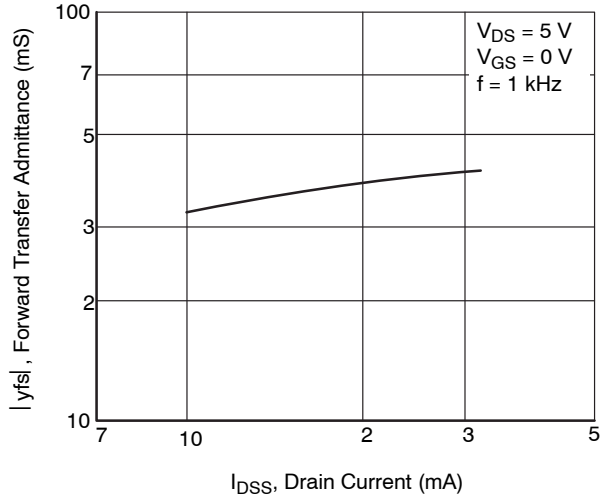


Figure 6. $|y_{fs}| - I_{DSS}$

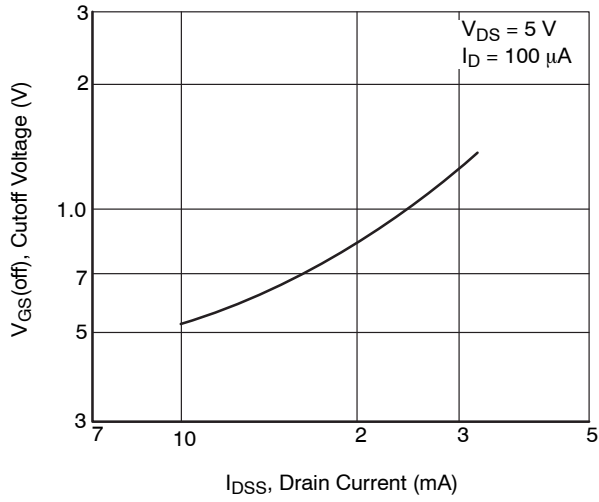


Figure 7. $V_{GS(off)} - I_{DSS}$

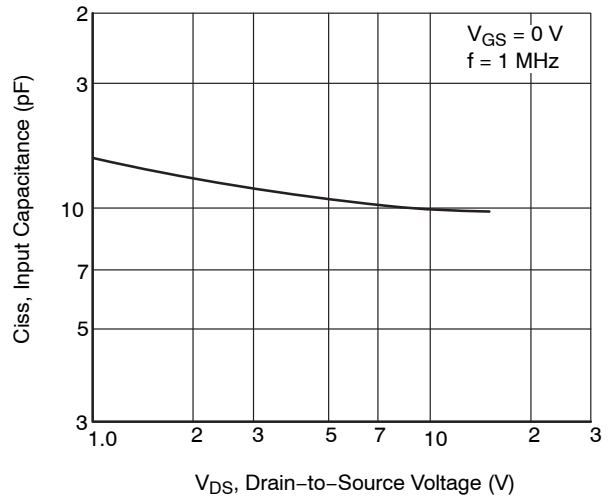


Figure 8. $C_{iss} - V_{DS}$

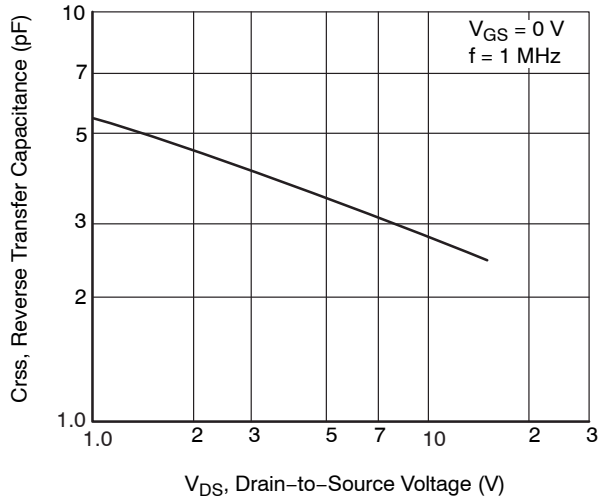


Figure 9. $C_{rss} - V_{DS}$

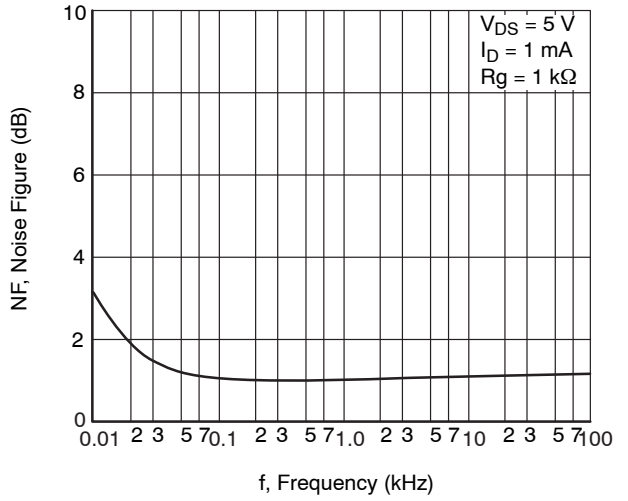


Figure 10. $NF - f$

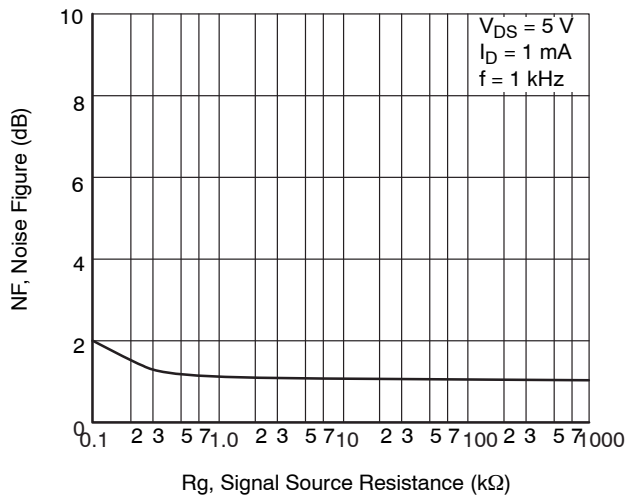


Figure 11. $NF - R_g$

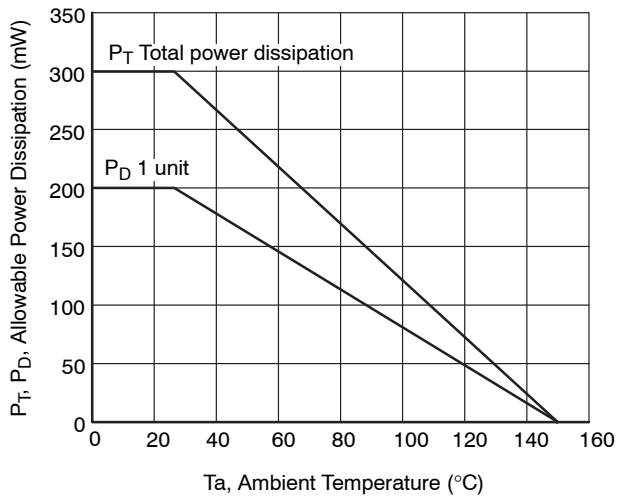
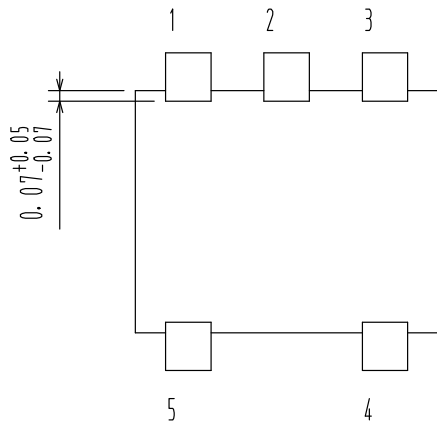
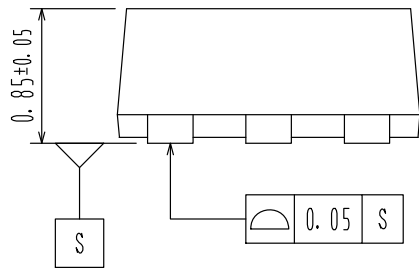
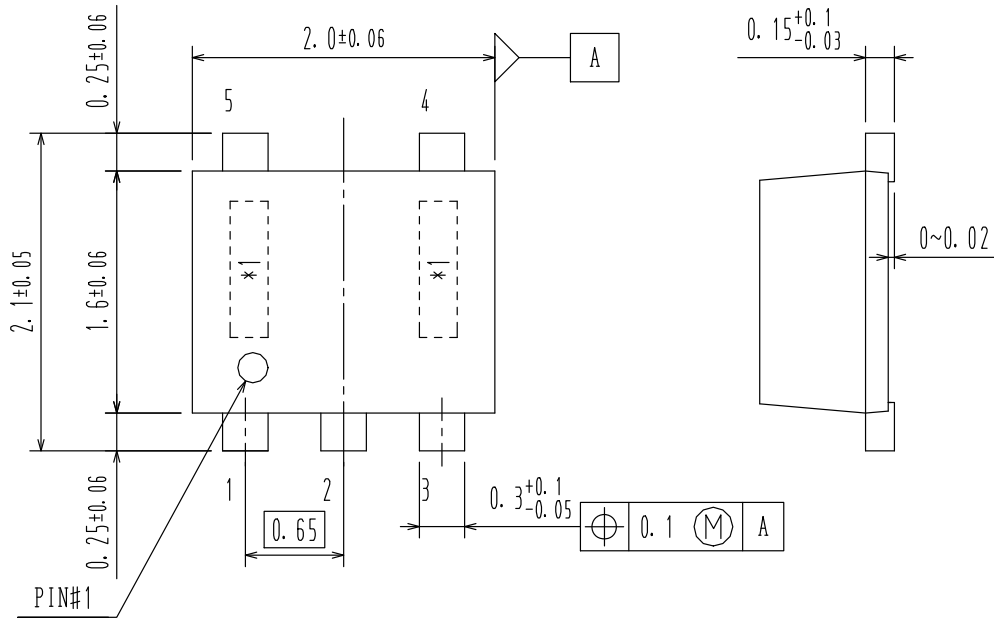


Figure 12. $P_T, P_D - T_a$

MECHANICAL CASE OUTLINE
PACKAGE DIMENSIONS

SC-88AFL/ MCPH5
CASE 419AP
ISSUE O

DATE 30 NOV 2011



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