



SANYO Semiconductors

# DATA SHEET

An ON Semiconductor Company

## MCH5908 — High-Frequency Amplifier, AM Amplifier, Low-Frequency Amplifier Applications

N-Channel Silicon Junction FET

### 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

### Specifications

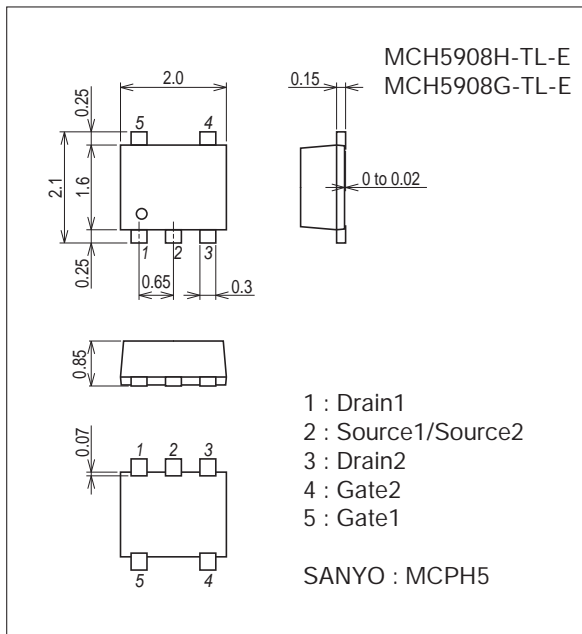
Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V <sub>DSX</sub>		15	V
Gate-to-Drain Voltage	V <sub>GD</sub>		-15	V
Gate Current	I <sub>G</sub>		10	mA
Drain Current	I <sub>D</sub>		50	mA
Allowable Power Dissipation	P <sub>D</sub>	1 unit	200	mW
Total Power Dissipation	P <sub>T</sub>		300	mW
Junction Temperature	T <sub>j</sub>		150	°C
Storage Temperature	T <sub>stg</sub>		-55 to +150	°C

### Package Dimensions

unit : mm (typ)

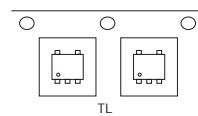
7021A-009



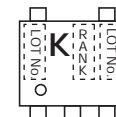
### Product & Package Information

- Package : MCPH5
- JEITA, JEDEC : SC-88A, SC-70-5, SOT-353
- Minimum Packing Quantity : 3,000 pcs./reel

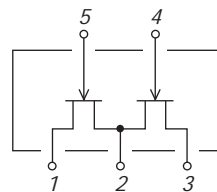
### Packing Type : TL



### Marking



### Electrical Connection



# MCH5908

## Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	V(BR)GD <sub>S</sub>	I <sub>G</sub> =-10μA, V <sub>DS</sub> =0V	-15			V
Gate-to-Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> =-10V, V <sub>DS</sub> =0V			-1.0	nA
Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> =5V, I <sub>D</sub> =100μA	-0.3	-0.7	-1.5	V
Zero-Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> =5V, V <sub>GS</sub> =0V	10.0*		32.0*	mA
Forward Transfer Admittance	y <sub>fs</sub>	V <sub>DS</sub> =5V, V <sub>GS</sub> =0V, f=1kHz	24	35		mS
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> =5V, V <sub>GS</sub> =0V, f=1MHz		10.5		pF
Reverse Transfer Capacitance	C <sub>rss</sub>			3.5		pF
Noise Figure	NF	V <sub>DS</sub> =5V, R <sub>g</sub> =1kΩ, I <sub>D</sub> =1mA, f=1kHz		1.0		dB

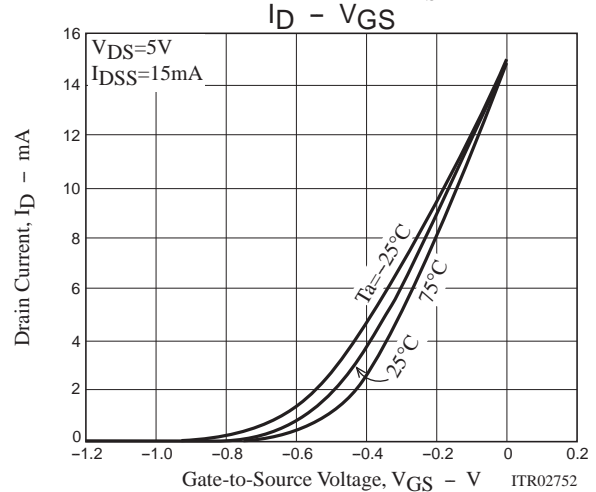
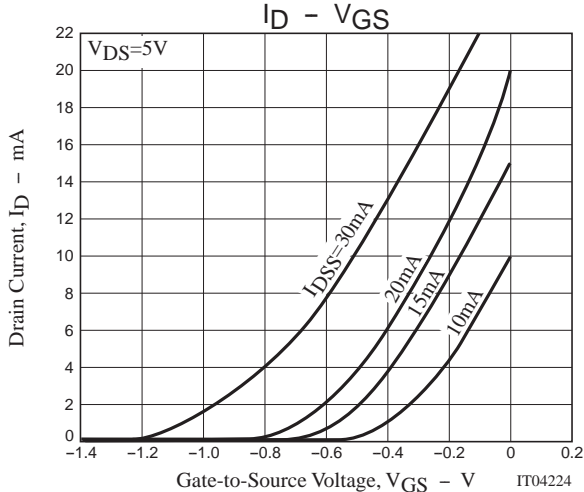
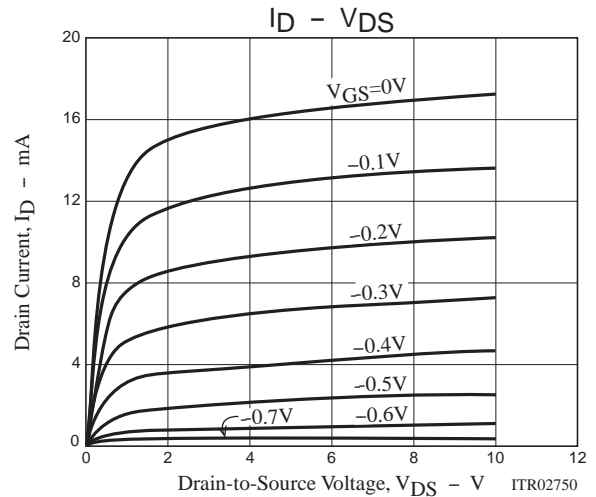
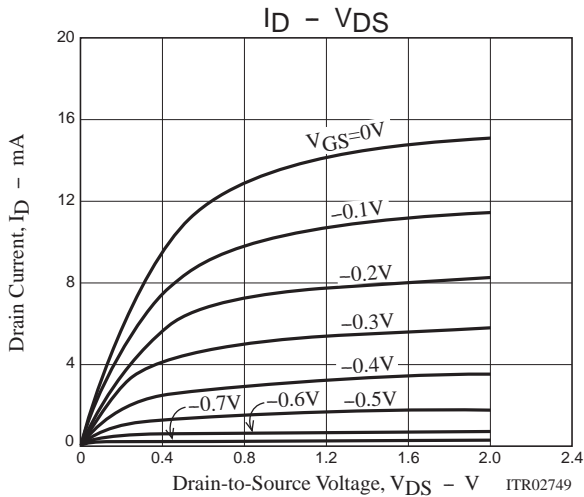
The specifications shown above are for each individual J-FET.

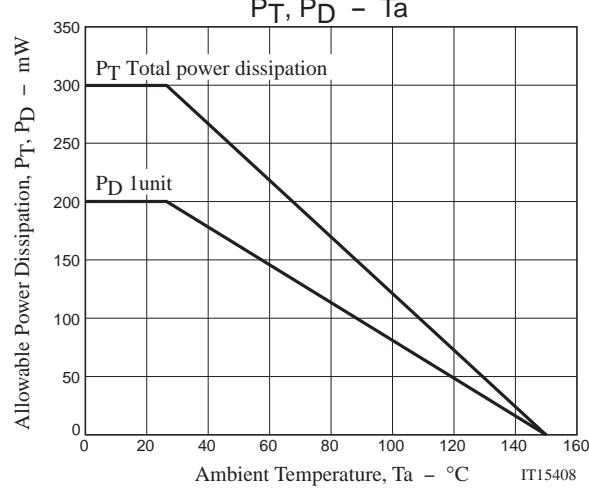
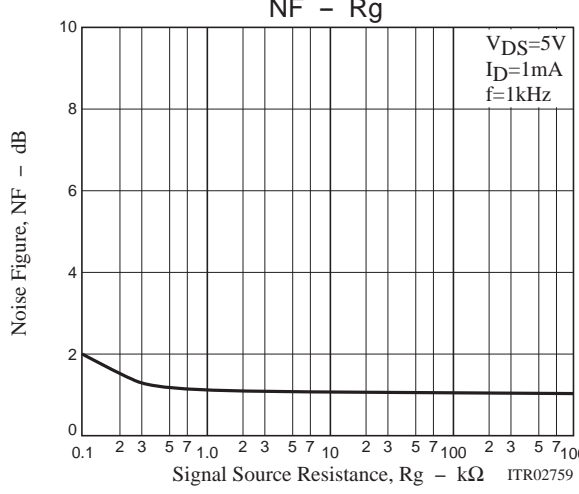
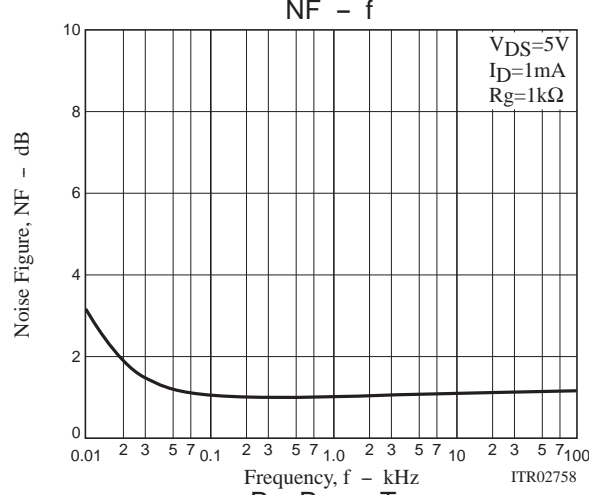
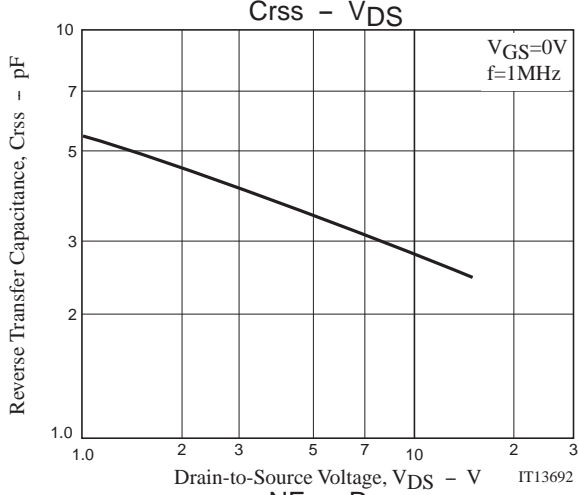
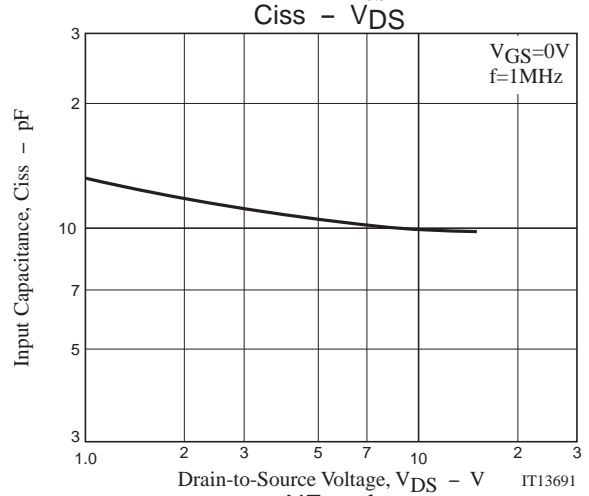
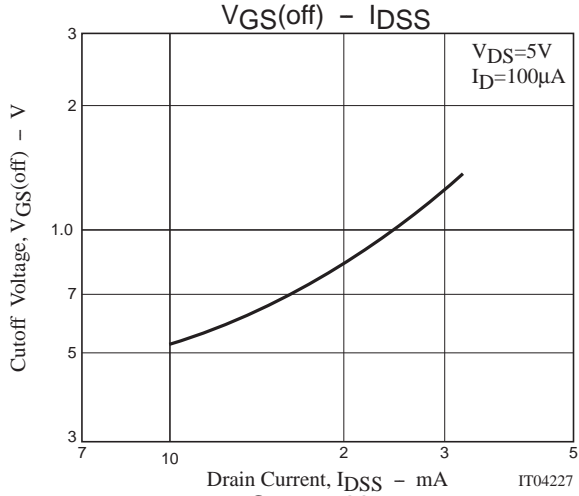
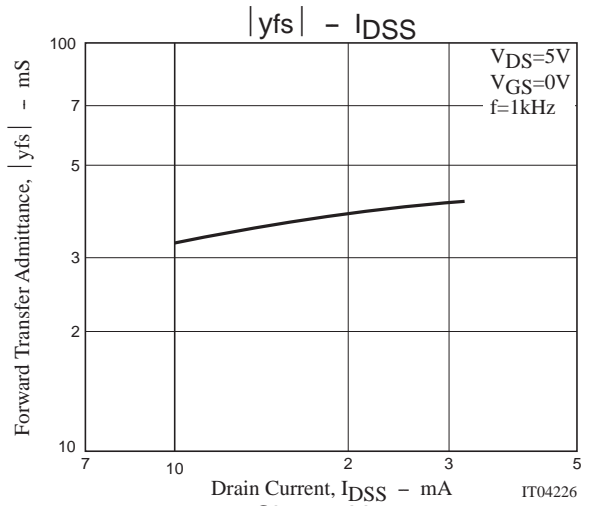
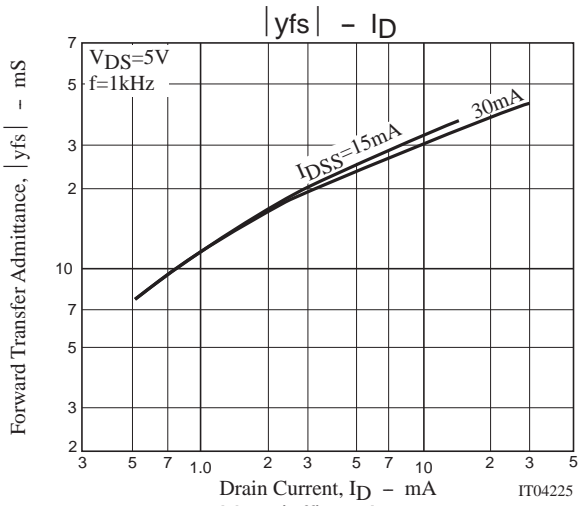
\* : The MCH5908 is classified by I<sub>DSS</sub> as follows (unit : mA).

Rank	G	H
I <sub>DSS</sub>	10 to 20	16 to 32

## Ordering Information

Device	Package	Shipping	memo
MCH5908H-TL-E	MCPH5	3,000pcs./reel	Pb Free
MCH5908G-TL-E	MCPH5	3,000pcs./reel	





Taping Specification

MCH5908H-TL-E, MCH5908G-TL-E

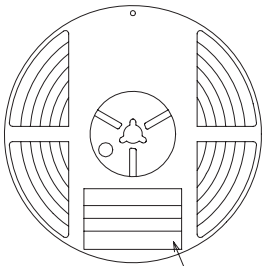
1. Packing Format

Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
MCPH5	MCP4	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

Reel label, Inner box label  
(unit : mm)

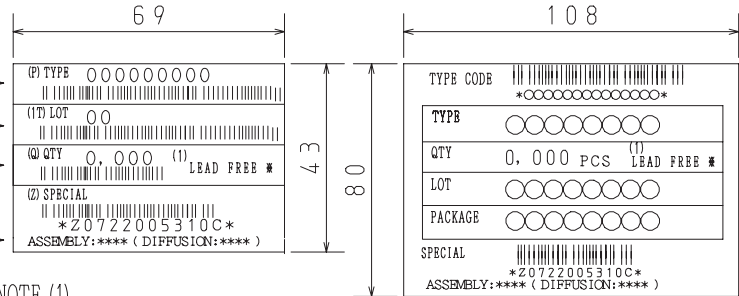
Outer box label  
It is a label at the time of factory shipments.  
The form of a label may change in physical distribution process.

Packing method



Type No.  
LOT No.  
Quantity  
Origin

Reel label



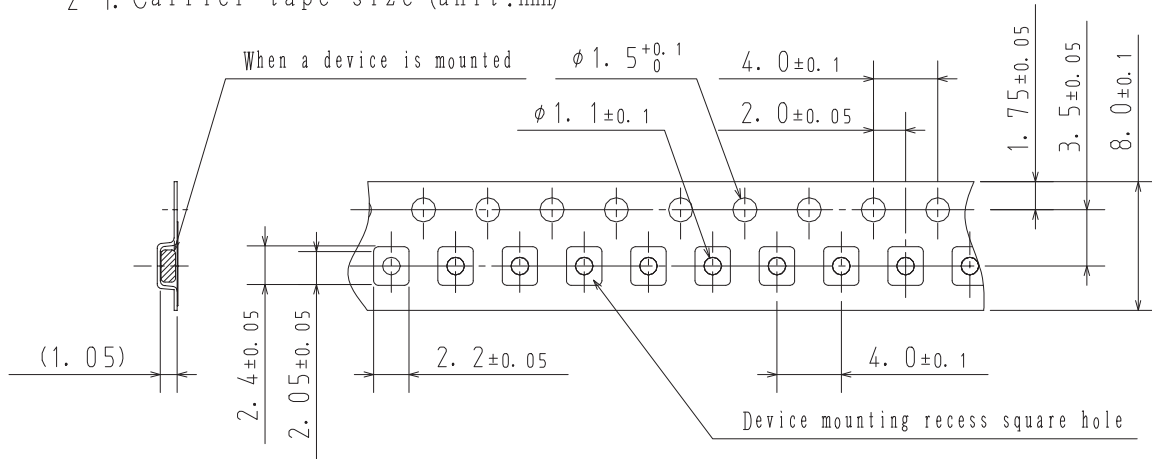
NOTE (1)

The LEAD FREE \* description shows that the surface treatment of the terminal is lead free.

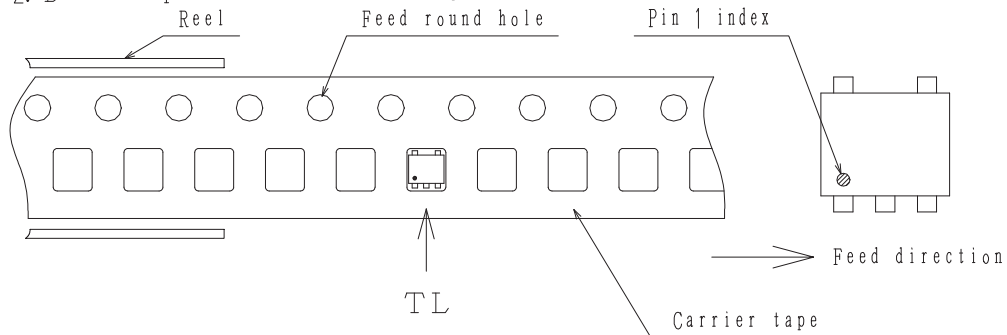
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

2-1. Carrier tape size (unit:mm)



2-2. Device placement direction

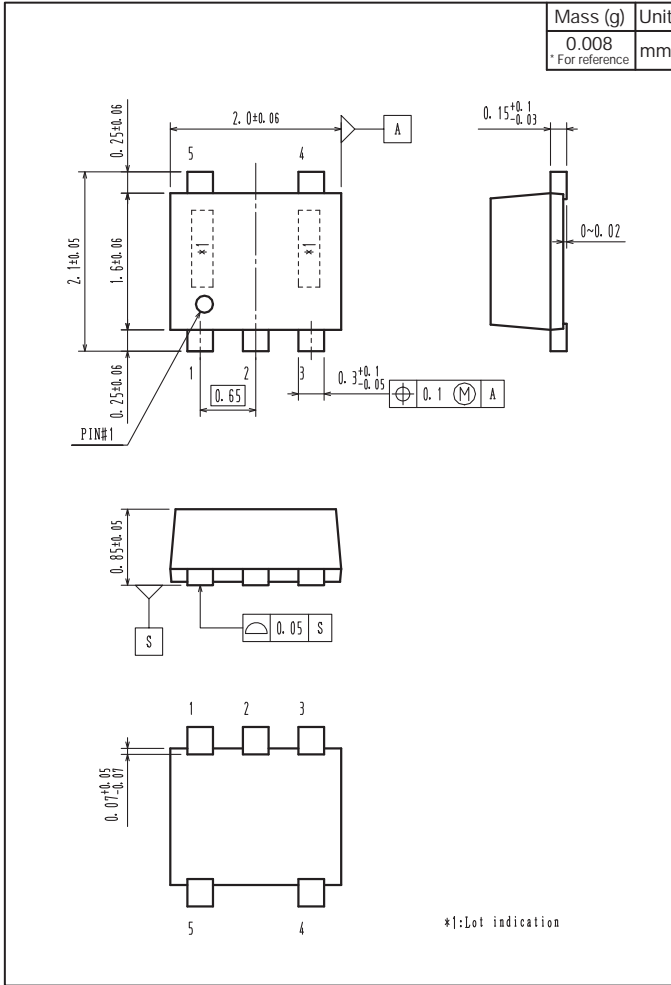


Those with two electrode terminal on the feed hole side.....TL

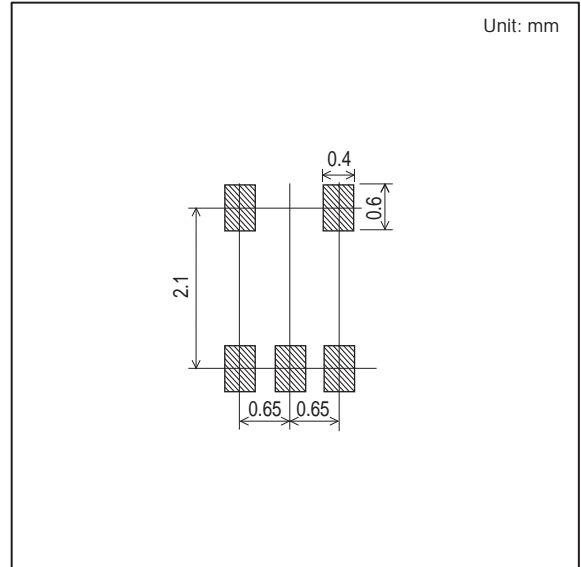
# MCH5908

## Outline Drawing

MCH5908H-TL-E, MCH5908G-TL-E



## Land Pattern Example



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