

SYNGLE ISOLATION AMPLIFIER

■ GENERAL DESCRIPTION

NJM2505 is the single isolation amplifier developed by the video signal. It can remove the noise of a signal with isolation amplifier and carries in the small package (MTP5), it is suitable for the interface of the video signal of a car AV system.

■ PACKAGE OUTLINE

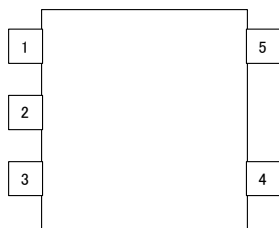


NJM2505F

■ FEATURES

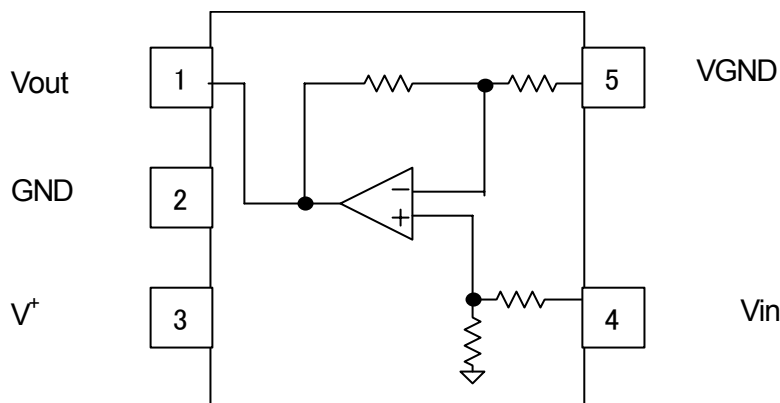
- Operating Voltage 4.5 to 9.0V
- Input: Sync-tip Clamp
- Common Mode Noise Rejection Ratio -55dBtyp.
- Voltage Gain 0dBtyp.
- Frequency Characteristics 0dBtyp.at 10MHz
- Bipolar Technology
- Package MTP5

■ PIN CONFIGURATION



- 1: Vout
- 2: GND
- 3: V+
- 4: Vin
- 5: VGND

■ BLOCK DIAGRAM



NJM2505

■ ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V ⁺	15.0	V
Power Dissipation	P _D	200	MW
Operating Temperature Range	Topr	-40 to +85	°C
Storage Temperature Range	Tstg	-40 to +125	°C

■ RECOMMENDED OPERATING CONDITION(Ta=25°C)

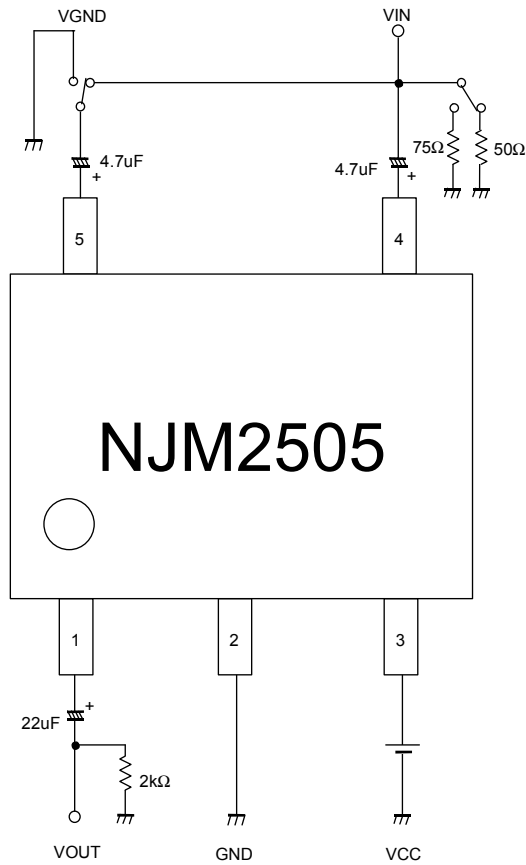
PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Operating Voltage Range	Vopr		4.5	-	9.0	V

■ ELECTRICAL CHARACTERISTICS(V⁺ =5.0V, Ta=25°C)

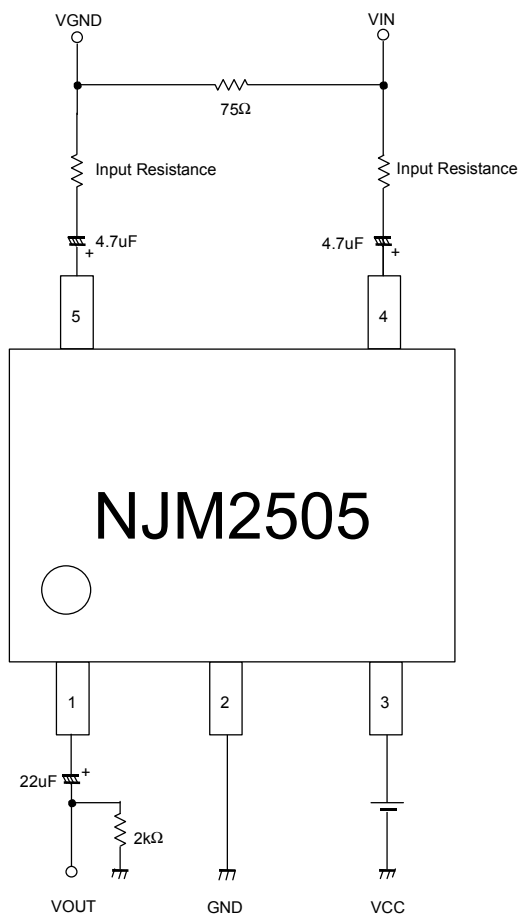
PARAMETR	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Current	I _{CC}	No Signal	-	3.0	6.0	mA
Maximum Output Voltage Level	V _{om}	V _{in} =100kHz, Sin-Signal, THD=1%,	2.0	2.2	-	Vp-p
Voltage Gain	G _v	V _{in} =100kHz, 1.0Vp-p, Sin-Signal	-1.0	0	1.0	dB
Frequency Characteristics	G _f	V _{in} =10MHz / 1MHz , 1.0VppSin-Signal	-1.0	0	1.0	dB
Common Mode Noise Rejection Ratio	CMR	V _{in} =20KHz, V _{in} =1Vpp	-	-55	-	dB
Differential Gain	DG	V _{in} =1.0Vp-p, 10step Video Signal	-	0.3	-	%
Differential Phase	DP	V _{in} =1.0Vp-p, 10step Video Signal	-	0.4	-	deg

■ TEST CIRCUIT

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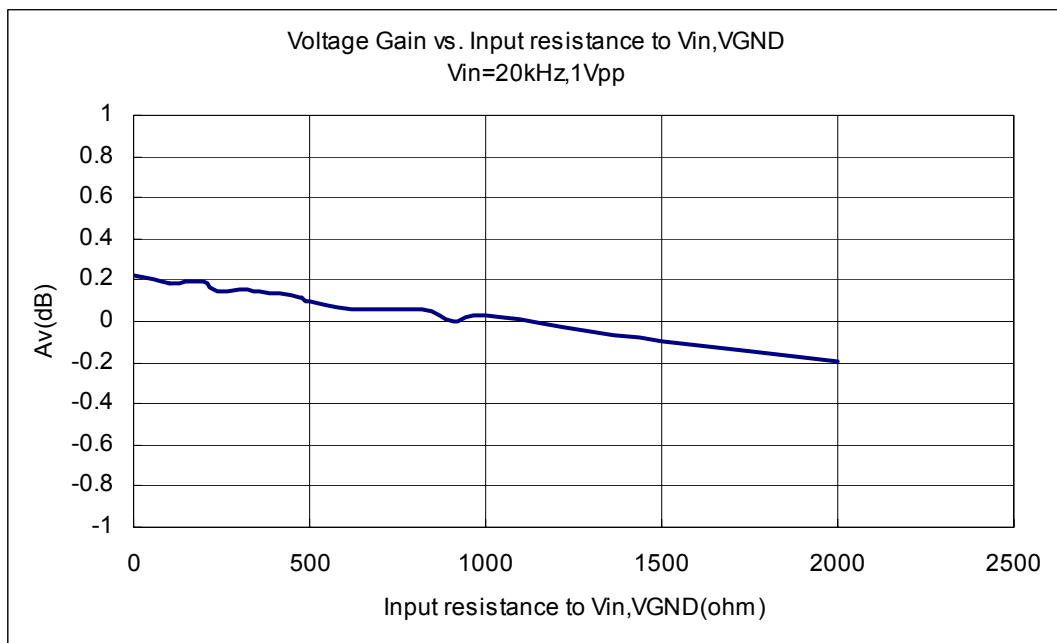
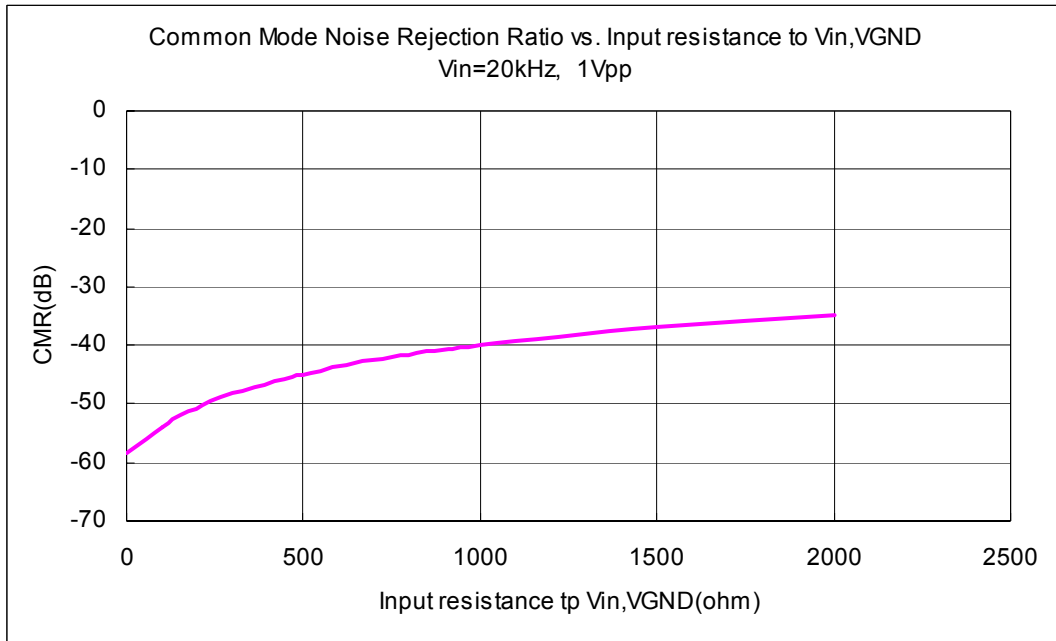
■ APPLICATION CIRCUIT



APPLICATION

Please connect resistance to 4pin (Vin) and 5pin(VGND). When voltage gain in this IC and common mode noise rejection ratio are changed with resistance. Please choose resistance with reference to the following typical characteristics.

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■ EQUIVALENT CIRCUIT

Pin.No	Symbol	Inside Equivalent Circuit	Voitage
1	Vout		0.92V
2	GND	-	-
3	V ⁺	-	-
4	Vin		1.67V
5	VGND		1.67V

[CAUTION]
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