

4-20ma passive signal isolated amplifier

DESCRIPTION

WJ101 is a signal isolated converter, contains current signal modulate-demodulate and isolated coupled circuit. To meet the requirements of long distance transmission with little distortion, only little equivalent resistance enables a wide input range of the IC input available. To meet the requirements of 3KVDC isolation, the wider operating temperature range, humidity and quiver, we adopt the fully SMT ceramic PCB, printed resistor techniques and the latest techniques.

Part No.	Input	Power supply	Output	Package
IAP4-20ma	4-20ma	None	4-20ma	SIP12



Features:

- >>3KVDC Isolation (input-output)
- >>4-20mA Input / Output, no power supply
- >>High Accuracy (Distortion<0.2%)
- >>High Linearity (Non-linearity<0.2%)
- >>Frequency Response (small signal bandwidth) :50HZ (I_o=20mA)
- >>Low Impedance (<2V)
- >>International Standard SIP 12
- >>Flaming Retardant
- >>Temperature Range: -40°C~+85°C

MAXIMUM RATINGS	
Continuous Isolation Voltage	3000Vrms
V _{in}	32V
Junction Temperature	+85°C
Storage Temperature	+150°C
Lead Temperature	+300°C
Output Short to Common	Continuous

TECHNICAL PARAMETERS

Parameter	Condition	Min	Type	Max	Units
Isolation(Between input and output)	30S 240Vrms, 50Hz		3000		VDC
Insulation Resistance			10 ¹² 1		Ω Pf
Leakage current			0.5		uA
Gain vs Temperature			±50	±100	PPm/
Nonlinearity			±0.1	±0.2	%FSK
Signal input voltage range		8		32	V
Output linearity range		0.03	4	20	mA
I _{out}		0.03		40	mA
V _{oh}	I _o =20mA			4	V
Output ripple			5		mV

Frequency response (Small signal bandwidth)	$I_o=20mA$		50		Hz
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All specifications measured at TA=25°C, humidity<75%, nominal input voltage and rated output load unless otherwise specified.

Size

(侧视图) **side view**

(底视图) **Bottom View**

引脚方式	
Pin 引脚	Function
1(lin+)	信号输入正
2(lin-)	信号输入负
9,10(lout-)	信号输出负
11,12(lout+)	信号输出正

注:
尺寸单位: mm[inch]
端子直径公差: $\pm 0.10mm[\pm 0.004inch]$
未标注之公差: $\pm 0.25mm[\pm 0.010inch]$

建议印刷板图 Printed Board

包装管尺寸 Package Tube Size

注:
尺寸单位: mm[inch]
未标注之公差: $\pm 0.50mm[\pm 0.020inch]$

Application:

FOOTPRINT DETAILS		
Pin	Function	
1	lin+	Signal input
2	GND	Signal input
9	lo-	Signal output
10	lo-	Signal output
11	lo+	Signal output
12	lo+	Signal output

