



#### Feature:

- Supply power for sensor:16V ~ 21.5V
- 4-20mA Signal loop input
- High linearity (Nonlinearity<0.2%)
- Low cost, small size, standard SIP12 package
- 4-20mA signal input/Output, 3000VDC isolated voltage
- Industrial temperature (-45—+85℃)
- Directly weld to PCB or DIN rail-mounted

#### Application:

- PLC,DCS analog signal data acquisition and isolation
- Industrial process 4-20mA signal isolation
- Ground-loop elimination
- No distortion in long distance signal transmission
- Instrument signal acquisition
- Electric supervision , medical application and Isolated safe bar

#### DESCRIPTION:

ISO 4-20mA-F is 4-20mA Signal Dual Loop Isolation Distributor IC, it belongs to SUNYUAN ISO 4-20mA series. The IC contains an electromagnetic coupled converter and current modulate, and a high efficiency DC-DC circuit and so on. The IC supplies to loop distributor 16V~21.5V, and meets requirements for 4-20mA loop sensor signal measurement, transmission, isolation and so on.,it can save energy and prevent exploding.The IC output is designed according to Loop circuit power supply of 24VDC and resistance connecting in series, it match to popular module input attachment board, PLC and DCS or the other equipment module input attachment. The internal ceramic PCB, printed impedance and new isolation technologies allow the IC for the 3KVAC insulated voltage and meets the industrial level for the extremely poor temperature, humidity and shaking conditions. ISO 4-20mA-F is easy to use.

#### MAXIMUM RATINGS:

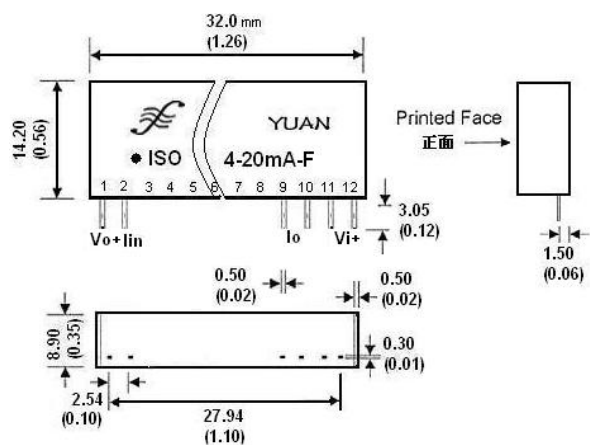
\* If input value is over above range, it may cause permanent damage.

Continuous Isolation Voltage	3000VDC
Vin (TYP)	28V
Junction Temperature	+85℃
Storage Temperature	+150℃
Lead Temperature	+300℃
Output Short to Common	Continuous

## GENERAL PARAMETER:

Parameter	Condition	Min	Typ	Max	Unit
Isolation		3000			
Rated continuous voltage AC, 50Hz	10S		$10^{12} \parallel 1$		VDC
Barrier impedance	240Vrms,50Hz		0.5		$\Omega \parallel \text{Pf}$
Leakage current					$\mu\text{A}$
Temperature Drift			$\pm 50$	$\pm 100$	PPm/ $^{\circ}\text{C}$
Nonlinearity			$\pm 0.2$	$\pm 0.5$	%FSK
Load capability	24VDC			500	$\Omega$
Signal input voltage range		1. 2		30	mA
Signal output voltage range			24	28	VDC
Output linearity range			4	24	mA
Io		1. 2		30	mA
Output signal ripple				5	mV
Frequency response (Small signal bandwidth)	Io=20mA		2		KHz

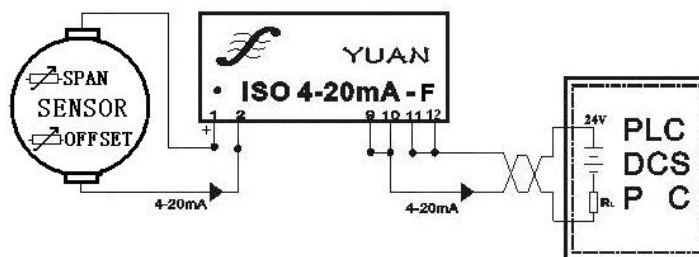
## DIMENSIONS AND PIN DESCRIPTION:



Pin	Function	
1	Vout	Voltage Output
2	Iin	Current Input
3~8		NC
9,10	Io	Signal output
11,12	VI+	Voltage input

**TYPICAL APPLICATION:**

**4-20mA Dual Loop Signal Isolation Distributor**



\* Specifications can be changed without notification.

Shenzhen Sun Yuan Technology Co.,Ltd.  
E-mail:sales02@szsunnyuan.com  
MSN:sun-yuan03@hotmail.com  
Skype:candyatsunnyuan