## Featrues:

$\star$ Low cost, small size, standard SIP12 package (32. $00 * 7.55 * 14.45 \mathrm{~mm}$ )
$\star 4-20 \mathrm{~mA}$ signal input/output
$\star$ Low input resistance, wide input voltage : $8 \mathrm{~V}-32 \mathrm{~V}$
$\star$ High linearity (Nonlinearity<0.1\%)
$\star$ 1KVAC/2. 5KVDC isolation intensity
$\star$ Operation temperature: $-25^{\circ} \mathrm{C}-71^{\circ} \mathrm{C}$
$\star$ Directly weld to PCB

## Application:

$\star$ Industrial process $4-20 \mathrm{~mA}$ signal isolation
$\star$ PLC, DCS analog signal acquisition and isolation
$\star$ No distortion in long distance signal transmission

$\star$ Electric supervision , medical application and Isolated safe bar

## Description:

K2200P series is $0 / 4-20 \mathrm{~mA}$ Signal Dual Loop Isolation IC, The IC contains an electromagnetic coupled converter and current modulate, and a high efficiency DC-DC circuit and so on, The IC getes tiny energy for operate from input signal loop. It meets requirements for $4-20 \mathrm{~mA}$ loop sensor signal measurement, transmission, isolation and so on. It can save energy and prevent explodind. Internal peculiar signal deal technology to make signal near zero and still to keep very high linearity, and To make signal need not adjust. The characteristic less than 3 V input impedance is suitable for $8-32 \mathrm{~V}$ wide range of input voltage. The internal ceramic PCB, printed impedance and new isolation technologies allow the IC for the 1.5KVAC/2.5KVDC insulated voltage and meets the industrial level for the extremely poor temperature, humidity and shaking conditions.
GENERAL PARAMETER:

## Package, Dimension and PIN description:

| PIN |  | FUNCTION |
| :---: | :---: | :---: |
| 1 | lout- | negative output |
| 2 | lout+ | positive output |
| $3 \sim 10$ |  | no connect |
| 11 | lin+ | positive input |
| 12 | lin- | negative input |




SIP 12 (unit: mm)

SHINHOM

## Featrues:

$\star$ Low cost, small size, standard SIP12 package (32. $00 * 7.55 * 14.45 \mathrm{~mm}$ )

* $4-20 \mathrm{~mA}$ signal input/output
* Supply power for sensor:16V-21.5V
$\star$ High linearity (Nonlinearity<0.5\%)
$\star$ 1KVAC/2. 5KVDC isolation intensity
$\star$ Operation temperature: $-25^{\circ} \mathrm{C}-71^{\circ} \mathrm{C}$
$\star$ Directly weld to PCB


## Application:

$\star$ Industrial process $4-20 \mathrm{~mA}$ signal isolation
$\star$ PLC, DCS analog signal acquisition and isolation
$\star$ No distortion in long distance signal transmission

$\star$ Electric supervision, medical application and Isolated safe bar

## Description:

K220IP series is $4-20 \mathrm{~mA}$ Signal Dual Loop Isolation Distributor IC, 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 $16-21.5 \mathrm{~V}$, and meets requirements for $4-20 \mathrm{~mA}$ loop sensor signal measurement, transmission, isolation and so on. It can save energy and prevent explodind, 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 $1.5 K V A C / 2$. 5KVDC insulated voltage and meets the industrial level for the extremely poor temperature, humidity and shaking conditions.

| GENERAL PARAMETER: |  |
| :--- | :--- |
| Min Starup Current | $>2 \mathrm{~mA}$ |
| Voltage Lost | $\langle 3.0 \mathrm{~V}$ |
| Max Current | $30 \mathrm{~mA} / 28 \mathrm{~V}$ |
| Frequency Response | $\langle 100 \mathrm{~ms}$ |
| Ripples Output | 20 mVrms |
| Nonlinearity | $\langle 0.5 \% \mathrm{FSK}$ |
| Odditional Error | $-15 \mathrm{uA} / 100 \mathrm{ohm}$ |
| Temperature Drift | $\left\langle 100 \mathrm{ppm} /{ }^{\circ} \mathrm{C}\right.$ |
| Isolation Intensity | $1 \mathrm{KVAC} / 2.5 \mathrm{KVDC} / 30 \mathrm{~S}$ |
| Operation Temperature | $-25^{\circ} \mathrm{C}-71^{\circ} \mathrm{C}$ |



## Package, Dimension and PIN description:

| PIN |  | FUNCTION |
| :---: | :---: | :---: |
| 1 | lout- | negative input |
| 2 | lout+ | positive input |
| $3 \sim 10$ |  | no connect |
| 11 | lin+ | positive output |
| 12 | lin- | negative output |




PCB component library
SIP 12 (unit: mm)

## Featrues:

$\star$ Low cost, small size, standard SIP12 package (32. $00 * 7.55 * 14.45 \mathrm{~mm}$ )
$\star$ High input impedance (no less than 100K)
$\star$ Three-port isolation (input, output and power supply)
$\star$ High linearity (Nonlinearity<0. $2 \%$ )
$\star 1 \mathrm{KVAC} / 2.5 \mathrm{KVDC}$ isolation intensity
$\star$ Operation temperature : $-25^{\circ} \mathrm{C}-71^{\circ} \mathrm{C}$
$\star$ Directly weld to PCB

## Application:

$\star$ Industrial process $4-20 \mathrm{~mA}$ signal isolation
$\star$ PLC, DCS analog signal acquisition and isolation
$\star$ No distortion in long distance signal transmission
$\star$ Electric supervision , medical application and Isolated safe bar


## Description:

KP series is a high Integration, high efficiency linear active isolation amplifier moudule, with anterior $0 / \mathrm{x}-\mathrm{xV}$ or $0 / \mathrm{x}-\mathrm{xmA}$ voltage or current signal input and posterior $0 / x-x V$ or $0 / x-x m A$ voltage or current output. These modules aor embedded with a isolated micro-power source, which can provide a restricted current protected isolation power for the input. Where requires signal isolation and provides isolated electrics-feed for the input, our products largely simplize customers' design and helpfully improve the systems reliability. By using magneto design, it is available to keep high accuracy and natural extremely low temperature drift. The internal ceramic PCB, printed impedance and new isolation technologies allow the moudule for the $1.5 \mathrm{KVAC} / 2$. 5 KVDC insulated voltage and meets the industrial level for the extremely poor temperature, humidity and shaking conditions.

## Slection Guide:



Package, Dimension and PIN description:

| PIN |  | FUNCTION | PIN |  | FUNCTION |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Sog | Signal GND |  |  |  |
| 2 | Io | Output Current + | 9 | NC | no connect |
| 3 | Vo | Output Voltage + | 10 | Rg | Signal adjust |
| 4 | $\mathrm{Vp}^{+}$ | Supply Power + | 11 | $\mathrm{Vi}^{+}$ | Signal Input + |
| 5 | $\mathrm{Vp}^{-}$ | Supply Power - | 12 | $\mathrm{Vi}^{-}$ | Signal Input + |



SIP12 (unit:mm)

## Featrues:

$\star$ Low cost, small size, standard SIP12 package (32. $00 * 7.55 * 14.45 \mathrm{~mm}$ )
$\star$ High input impedance (no less than 100K)
$\star$ Three-port isolation (input, output and power supply)
$\star$ AC-DC, High linearity (Nonlinearity<0. $2 \%$ )
$\star 1 \mathrm{KVAC} / 2.5 \mathrm{KVDC}$ isolation intensity
$\star$ Operation temperature: $-25^{\circ} \mathrm{C}-71^{\circ} \mathrm{C}$
$\star$ Directly weld to PCB

## Application:

$\star$ Industrial process $4-20 \mathrm{~mA}$ signal isolation
$\star$ PLC, DCS analog signal acquisition and isolation
$\star$ No distortion in long distance signal transmission
$\star$ Electric supervision , medical application and Isolated safe bar


## Description:

KAP series is a high Integration, high efficiency linear active isolation $A C-D C$ amplifier moudule, with anterior $0 / x-x V$ or $0 / x-x m A$ AC voltage or current signal input and posterior $0 / x-x V$ or $0 / x-x m A D C$ voltage or current output. These modules are embedded with a isolated micro-power source, which can provide a restricted current protected isolation power for the input. Where requires signal isolation and provides isolated electrics-feed for the input, our products largely simplize custo -mers' design and helpfully improve the systems reliability. By using magneto design, it is available to keep high accuracy and natural extremely low temperature drift. The internal ceramic PCB, printed impedance and new isolation technologies allow the moudule for the $1.5 \mathrm{KVAC} / 2.5 \mathrm{KVDC}$ insulated voltage and meets the industrial level for the extremely poor tem -perature, humidity and shaking conditions.

## Slection Guide:



Package, Dimension and PIN description:

| PIN |  | FUNCTION | PIN |  | FUNCTION |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Sog | Signal GND |  |  |  |
| 2 | Io | Output Current + | 9 | NC | no connect |
| 3 | Vo | Output Voltage + | 10 | Rg | Signal adjust |
| 4 | $\mathrm{Vp}+$ | Supply Power + | 11 | $\mathrm{Vi+}$ | Signal Input + |
| 5 | $\mathrm{Vp}^{-}$ | Supply Power - | 12 | $\mathrm{Vi}^{-}$ | Signal Input + |



SIP12 (unit:mm)

## Featrues:

$\star$ Low cost, small size, standard SIP12 package (32. $00 * 7.55 * 14.45 \mathrm{~mm}$ )
$\star$ High input impedance (no less than 100K)
$\star$ Three-port isolation (input, output and power supply)
$\star \pm$ two-polar input/output, High linearity (Nonlinearity<0. 2\%)
$\star 1 \mathrm{KVAC} / 2$. 5 KVDC isolation intensity
$\star$ Operation temperature : $-25^{\circ} \mathrm{C}-71^{\circ} \mathrm{C}$
$\star$ Directly weld to PCB

## Application:

$\star$ Industrial process $4-20 \mathrm{~mA}$ signal isolation
$\star$ PLC, DCS analog signal acquisition and isolation
$\star$ No distortion in long distance signal transmission
$\star$ Electric supervision , medical application and Isolated safe bar


## Description:

KBP series is a high Integration, high efficiency linear active isolation $\pm$ two-polar input/output amplifier moudule, with anterior $0 / x- \pm x V$ or $0 / x- \pm x m A ~ \pm t w o-p o l a r$ voltage or current signal input and posterior $0 / x- \pm x V$ or $0 / x- \pm x m A ~ \pm t w o-p o l a r$ voltage or current output. These modules are embedded with a isolated micro-power source, which can provide a restricted current protected isolation power for the input. Where requires signal isolation and provides isolated electrics-feed for the input, our products largely simplize customers' design and helpfully improve the systems reliability. By using magneto design, it is available to keep high accuracy and natural extremely low temperature drift. The internal ceramic PCB, printed impedance and new isolation technologies allow the moudule for the $1.5 \mathrm{KVAC} / 2.5 \mathrm{KVDC}$ insulated voltage and meets the industrial level for the extremely poor temperature, humidity and shaking conditions.

## Slection Guide:



Package, Dimension and PIN description:

| PIN |  | FUNCTION | PIN |  | FUNCTION |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Sog | Signal GND |  |  |  |
| 2 | Io | Output Current + | 9 | NC | no connect |
| 3 | Vo | Output Voltage + | 10 | Rg | Signal adjust |
| 4 | $\mathrm{Vp}^{+}$ | Supply Power + | 11 | $\mathrm{Vi}^{+}$ | Signal Input + |
| 5 | $\mathrm{Vp}^{-}$ | Supply Power - | 12 | $\mathrm{Vi}^{-}$ | Signal Input + |



SIP12 (unit:mm)

## Featrues:

$\star$ small size, standard DIN rail package (35mm)
$\star 4-20 \mathrm{~mA}$ signal input/output
$\star$ High linearity (Nonlinearity<0.1\%)
$\star$ High accuracy ( $0.1 \%$ ), Low temperature drift (no more than $50 \mathrm{ppm} /{ }^{\circ} \mathrm{C}$ )
$\star$ 1KVAC/2. 5KVDC isolation intensity
$\star$ Operation temperature: $-25^{\circ} \mathrm{C}-71^{\circ} \mathrm{C}$
$\star$ Response time: 100mS

## Application:

$\star$ Industrial process $4-20 \mathrm{~mA}$ signal isolation
$\star$ PLC, DCS analog signal acquisition and isolation
$\star$ No distortion in long distance signal transmission
$\star$ Electric supervision, medical application and Isolated safe bar



1-4Channel Signal
Isolator

## Description:

K2200N series is $0 / 4-20 \mathrm{~mA}$ Signal Dual Loop Isolation devices, It contains an electromagnetic coupled converterand current modulate, and a high efficiency DC-DC circuit and so on, The devices getes tiny energy for operate from input signal loop . It meets requirements for $4-20 \mathrm{~mA}$ loop sensor signal measurement, transmission, isolation and so on. It can save energy and preventexplodind. Internal peculiar signal deal technology to make signal near zero and still to keep very high linearity, and To make signal need not adjust. The characteristic less than 3 V input impedance is suitable for $8-32 \mathrm{~V}$ wide range of input voltage. The internal ceramic PCB , printed impedance and new isolation technologies allow the devices for the 1. 5KVAC/2. 5KVDC insulated voltage and meets the industrial level for the extremely poor temperature, humidity and shaking conditions. Inside one devices is made up of most four signal isolate channel.

| GENERAL PARAMETER: |  |
| :--- | :--- |
| Min Starup Current | $\langle 20 \mathrm{uA}$ |
| Voltage Lost | $\langle 3.0 \mathrm{~V}$ |
| Max Current | $30 \mathrm{~mA} / 28 \mathrm{~V}$ |
| Frequency Response | $<100 \mathrm{~ms}$ |
| Ripples Output | 20 mVrms |
| Nonlinearity | $<0.2 \% \mathrm{FSK}$ |
| Odditional Error | $-8 \mathrm{uA} / 100 \mathrm{ohm}$ |
| Temperature Drift | $<100 \mathrm{ppm} /{ }^{\circ} \mathrm{C}$ |
| Isolation Intensity | $1 \mathrm{KVAC} / 2.5 \mathrm{KVDC} / 30 \mathrm{~S}$ |
| Operation Temperature | $-25^{\circ} \mathrm{C}-71{ }^{\circ} \mathrm{C}$ |

lutput to supply power

## Package, Dimension and PIN description:



DIN rail:35mm

SHINHOM

## Featrues:

$\star$ small size, standard DIN rail package (35mm)
$\star 4-20 \mathrm{~mA}$ signal input/output

* Supply power for sensor:16V-21.5V
$\star$ High accuracy (0.5\%) , Low temperature drift (no more than $100 \mathrm{ppm} /{ }^{\circ} \mathrm{C}$ )
$\star$ 1KVAC/2. 5KVDC isolation intensity
$\star$ Operation temperature: $-25^{\circ} \mathrm{C}-71^{\circ} \mathrm{C}$
$\star$ Response time:100mS


## Application:

$\star$ Industrial process $4-20 \mathrm{~mA}$ signal isolation
$\star$ PLC, DCS analog signal acquisition and isolation
$\star$ No distortion in long distance signal transmission
$\star$ Electric supervision, medical application and Isolated safe bar



1-4Channel Signal
Isolator

## Description:

K220IN series is $4-20 \mathrm{~mA}$ Signal Dual Loop Distributor Isolation devices, It contains an electromagnetic coupled conver -terand current modulate, and a high efficiency DC-DC circuit and so on, The devices getes tiny energy for operate from Output signal loop. Output is designed according to loop circuit power supply of 24VDC and resistance, connecting in series supplies to anterior loop distributor $16-21.5 \mathrm{~V}$. it match to popular module input attachment board, PLC and DCS or the other equipment module input attachment. It meets requirements for $4-20 \mathrm{~mA}$ loop sensor signal measurement, transmission, isolation and so on. It can save energy and preventexplodind. The internal ceramic PCB, printed impedance and new isolation technologies allow the devices for the $1.5 \mathrm{KVAC} / 2.5 \mathrm{KVDC}$ insulated voltage and meets the industrial level for the extremely poor temperature, humidity and shaking conditions. Inside one devices is made up of most four signal isolate channel.

| GENERAL PARAMETER: |  |
| :--- | :--- |
| Min Starup Current | $>2 \mathrm{~mA}$ |
| Voltage Lost | $\langle 3.0 \mathrm{~V}$ |
| Max Current | $30 \mathrm{~mA} / 28 \mathrm{~V}$ |
| Frequency Response | $<100 \mathrm{~ms}$ |
| Ripples Output | 20 mVrms |
| Nonlinearity | $<0.5 \% \mathrm{FSK}$ |
| Odditional Error | $-15 \mathrm{uA} / 100 \mathrm{ohm}$ |
| Temperature Drift | $<100 \mathrm{ppm} /{ }^{\circ} \mathrm{C}$ |
| Isolation Intensity | $1 \mathrm{KVAC} / 2.5 \mathrm{KVDC} / 30 \mathrm{~S}$ |
| Operation Temperature | $-25^{\circ} \mathrm{C}-71^{\circ} \mathrm{C}$ |

two-wire system
transmitting inst
K220IN-?

| Assemble |  |
| :---: | :--- |
| -1 | 1 channel |
| -2 | 2 channel |
| -3 | 3 channel |
| -4 | 4 channel |
| -12 | 1 separate to2 |
| -24 | 2 separate to4 |

Package, Dimension and PIN description:



Output to supply power
DIN rail: 35 mm

## Featrues

$\star$ small size, standard DIN rail package ( 35 mm )
$\star$ High input impedance (no less than 100K)
$\star$ Three-port isolation (input, output and power supply)
$\star$ High linearity (Nonlinearity $<0.2 \%$ )
$\star$ 1KVAC/2.5KVDC isolation intensity
$\star$ Operation temperature: $-25^{\circ} \mathrm{C}-71^{\circ} \mathrm{C}$
$\star$ Response time: 100 mS

## Application:

$\star$ Industrial process signal isolation
$\star$ PLC, DCS analog signal acquisition and isolation
$\star$ No distortion in long distance signal transmission
$\star$ Electric supervision , medical application and Isolated safe bar



1-3Channel Signal
Isolator

## Description:

KPN series is a high Integration, high efficiency linear active isolation amplifier moudule, with anterior $0 / \mathrm{x}-\mathrm{xV}$ or $0 / \mathrm{x}-\mathrm{xm} \mathrm{A}$ voltage or current signal input and posterior $0 / x-x V$ or $0 / x-x m A$ voltage or current output. These modules are embedded with a isolated micro-power source, which can provide a restricted current protected isolation power for the input. Where requires signal isolation and provides isolated electrics-feed for the input, our products largely simplize customers' design and helpfully improve the systems reliability. By using magneto design, it is available to keep high accuracy and natural extremely low temperature drift. The internal ceramic PCB, printed impedance and new isolation technologies allow the moudule for the $1.5 \mathrm{KVAC} / 2.5 \mathrm{KVDC}$ insulated voltage and meets the industrial level for the extremely poor temperature, humidity and shaking conditions.

## Slection Guide:



Package, Dimension
 and PIN description:


DIN rail: 35 mm

