

NVI-D Series Product



- ※ Small in size and highly reliable
- ※ Output voltage accuracy up to $\pm 3\%$
- ※ High cost performance
- ※ The small ripple, the classical value is less than $30\text{mV}_{\text{pk-pk}}$
- ※ A variety of input and output voltage
- ※ Build-in input filter, low electromagnetic compatibility

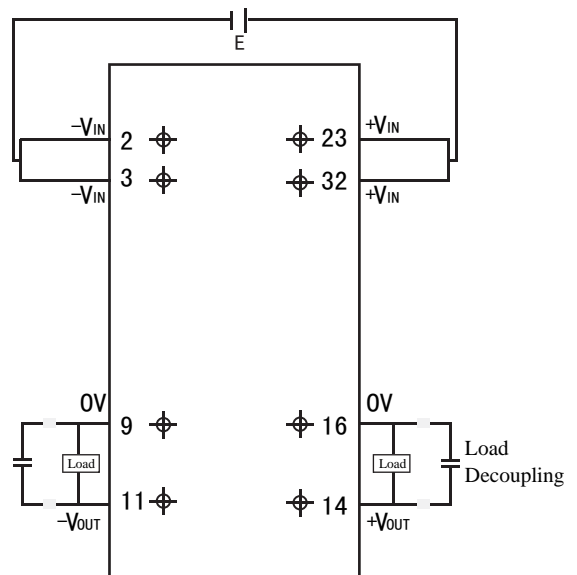
| Input Feature | |
|---------------------|---|
| Input voltage range | $4.75V_{\text{DC}} - 5.25V_{\text{DC}}$ $11.40V_{\text{DC}} - 12.60V_{\text{DC}}$ $14.25V_{\text{DC}} - 15.75V_{\text{DC}}$ $22.80V_{\text{DC}} - 25.20V_{\text{DC}}$ $45.60V_{\text{DC}} - 50.40V_{\text{DC}}$ |

| Temperature Feature | |
|----------------------|---|
| Operating ambient | $-25^{\circ}\text{C} \sim +85^{\circ}\text{C}$ |
| Max Case temperature | $+90^{\circ}\text{C}$ |
| Storage temperature | $-40^{\circ}\text{C} \sim +120^{\circ}\text{C}$ |
| Relative density | 10RH~90RH |

| Output Features | |
|-------------------------|--|
| voltage accuracy | Nominal output voltage $\pm 3\%$ |
| Load regulation | $\leq \pm 1.0\%$ (max) (when load changes between 20% ~ 100%) |
| Line regulation | $\leq \pm 1.0\%$ (max) (when input voltage changes from low to high) |
| Ripple and noise | $\leq 50\text{mV}_{\text{pk-pk}}$ (max) |
| Temperature coefficient | $\leq \pm 0.02\%/^{\circ}\text{C}$ (max) |

Basic Wiring

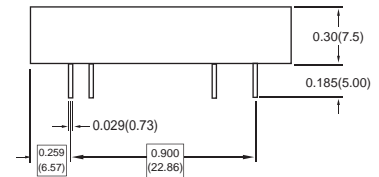
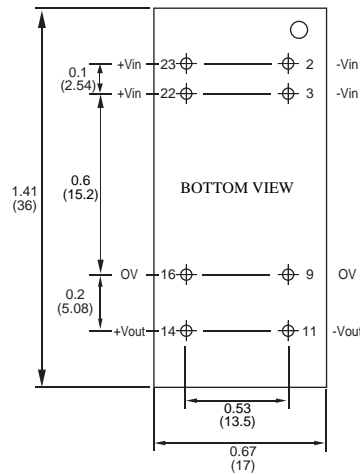
| General Feature | |
|-------------------|--|
| Efficiency | Reference selection table |
| Isolation voltage | $1000V_{\text{DC}}$ (from input to output, leakage current $< 2\text{mA}/\text{min}$) |



| Name | Input Voltage Range (V) | Nominal Output Voltage (V) | | Nominal Output Current (mA) | | Ripple and Noise (mVp-p) | | Typical Efficiency (%) |
|----------------|-------------------------|----------------------------|-------|-----------------------------|-------|--------------------------|------|------------------------|
| | | Vout1 | Vout2 | Iout1 | Iout2 | out1 | out2 | |
| NVI5S2V5/100D | 4.75 - 5.25 | 2.5 | | 100 | | 50 | | 45 |
| NVI5S3V3/100D | 4.75 - 5.25 | 3.3 | | 100 | | 50 | | 45 |
| NVI5S5/100D | 4.75 - 5.25 | 5 | | 100 | | 50 | | 45 |
| NVI5S12/100D | 4.75 - 5.25 | 12 | | 100 | | 50 | | 52 |
| NVI5S15/100D | 4.75 - 5.25 | 15 | | 100 | | 50 | | 52 |
| NVI5S24/50D | 4.75 - 5.25 | 24 | | 50 | | 50 | | 52 |
| NVI12S2V5/100D | 11.40 - 12.60 | 2.5 | | 100 | | 50 | | 45 |
| NVI12S3V3/100D | 11.40 - 12.60 | 3.3 | | 100 | | 50 | | 45 |
| NVI12S5/100D | 11.40 - 12.60 | 5 | | 100 | | 50 | | 52 |
| NVI12S12/100D | 11.40 - 12.60 | 12 | | 100 | | 50 | | 52 |
| NVI12S15/100D | 11.40 - 12.60 | 15 | | 100 | | 50 | | 52 |
| NVI12S24/50D | 11.40 - 12.60 | 24 | | 50 | | 50 | | 45 |
| NVI15S2V5/100D | 14.25 - 15.75 | 2.5 | | 100 | | 50 | | 45 |
| NVI15S3V3/100D | 14.25 - 15.75 | 3.3 | | 100 | | 50 | | 45 |
| NVI15S5/100D | 14.25 - 15.75 | 5 | | 100 | | 50 | | 45 |
| NVI15S12/100D | 14.25 - 15.75 | 12 | | 100 | | 50 | | 52 |
| NVI15S15/100D | 14.25 - 15.75 | 15 | | 100 | | 50 | | 52 |
| NVI15S24/50D | 14.25 - 15.75 | 24 | | 50 | | 50 | | 52 |
| NVI24S2V5/100D | 22.80 - 25.20 | 2.5 | | 100 | | 50 | | 45 |
| NVI24S3V3/100D | 22.80 - 25.20 | 3.3 | | 100 | | 50 | | 45 |
| NVI24S5/100D | 22.80 - 25.20 | 5 | | 100 | | 50 | | 45 |
| NVI24S12/100D | 22.80 - 25.20 | 12 | | 100 | | 50 | | 52 |
| NVI24S15/100D | 22.80 - 25.20 | 15 | | 100 | | 50 | | 52 |
| NVI24S24/50D | 22.80 - 25.20 | 24 | | 50 | | 50 | | 52 |
| NVI5D5/100D | 4.75 - 5.25 | +5 | -5 | 100 | 100 | 50 | 50 | 45 |
| NVI5D12/50D | 4.75 - 5.25 | +12 | -12 | 50 | 50 | 50 | 50 | 52 |
| NVI5D15/50D | 4.75 - 5.25 | +15 | -15 | 50 | 50 | 50 | 50 | 52 |
| NVI5D24/20D | 4.75 - 5.25 | +24 | -24 | 20 | 20 | 50 | 50 | 52 |
| NVI12D5/100D | 11.40 - 12.60 | +5 | -5 | 100 | 100 | 50 | 50 | 45 |
| NVI12D12/50D | 11.40 - 12.60 | +12 | -12 | 50 | 50 | 50 | 50 | 52 |
| NVI12D15/50D | 11.40 - 12.60 | +15 | -15 | 50 | 50 | 50 | 50 | 52 |
| NVI12D24/20D | 11.40 - 12.60 | +24 | -24 | 20 | 20 | 50 | 50 | 52 |
| NVI15D5/100D | 14.25 - 15.75 | +5 | -5 | 100 | 100 | 50 | 50 | 45 |
| NVI15D12/50D | 14.25 - 15.75 | +12 | -12 | 50 | 50 | 50 | 50 | 52 |
| NVI15D15/50D | 14.25 - 15.75 | +15 | -15 | 50 | 50 | 50 | 50 | 52 |
| NVI15D24/20D | 14.25 - 15.75 | +24 | -24 | 20 | 20 | 50 | 50 | 52 |
| NVI24D5/100D | 22.80 - 25.20 | +5 | -5 | 100 | 100 | 50 | 50 | 45 |
| NVI24D12/50D | 22.80 - 25.20 | +12 | -12 | 50 | 50 | 50 | 50 | 52 |
| NVI24D15/50D | 22.80 - 25.20 | +15 | -15 | 50 | 50 | 50 | 50 | 52 |
| NVI24D24/20D | 22.80 - 25.20 | +24 | -24 | 20 | 20 | 50 | 50 | 52 |
| NVI5S2V5/200D | 4.75 - 5.25 | 2.5 | | 200 | | 50 | | 45 |
| NVI5S3V3/200D | 4.75 - 5.25 | 3.3 | | 200 | | 50 | | 45 |
| NVI5S5/200D | 4.75 - 5.25 | 5 | | 200 | | 50 | | 45 |
| NVI5S5/300D | 4.75 - 5.25 | 5 | | 300 | | 50 | | 45 |
| NVI12S2V5/200D | 11.40 - 12.60 | 2.5 | | 200 | | 50 | | 45 |
| NVI12S3V3/200D | 11.40 - 12.60 | 3.3 | | 200 | | 50 | | 45 |
| NVI12S5/200D | 11.40 - 12.60 | 5 | | 200 | | 50 | | 45 |
| NVI24S2V5/200D | 22.8 - 25.20 | 2.5 | | 200 | | 50 | | 45 |
| NVI24S3V3/200D | 22.8 - 25.20 | 3.3 | | 200 | | 50 | | 45 |
| NVI24S5/200D | 22.8 - 25.20 | 5 | | 200 | | 50 | | 45 |
| NVI5D12/100D | 4.75 - 5.25 | +12 | -12 | 100 | 100 | 50 | 50 | 52 |
| NVI5D15/100D | 4.75 - 5.25 | +15 | -15 | 100 | 100 | 50 | 50 | 52 |
| NVI12D12/100D | 11.40 - 12.60 | +12 | -12 | 100 | 100 | 50 | 50 | 52 |

| Name | Input Voltage Range (V) | Nominal Output Voltage (V) | | Nominal Output Current (mA) | | Ripple and Noise (mVp-p) | | Typical Efficiency (%) |
|----------------|-------------------------|----------------------------|-------|-----------------------------|-------|--------------------------|------|------------------------|
| | | Vout1 | Vout2 | Iout1 | Iout2 | out1 | out2 | |
| NVI12D15/100D | 11.40 - 12.60 | +15 | -15 | 100 | | 50 | | 52 |
| NVI15D12/100D | 14.25 - 15.75 | +12 | -12 | 100 | | 50 | | 52 |
| NVI15D15/100D | 14.25 - 15.75 | +15 | -15 | 100 | | 50 | | 52 |
| NVI24D12/100D | 22.80 - 25.20 | +12 | -12 | 100 | | 50 | | 52 |
| NVI24D15/100D | 22.80 - 25.20 | +15 | -15 | 100 | | 50 | | 52 |
| NVI5S2V5/300D | 4.75 - 5.25 | 2.5 | | 300 | 100 | 50 | 50 | 45 |
| NVI5S3V3/300D | 4.75 - 5.25 | 3.3 | | 300 | 100 | 50 | 50 | 45 |
| NVI12S2V5/300D | 11.40 - 12.60 | 2.5 | | 300 | 100 | 50 | 50 | 45 |
| NVI12S3V3/300D | 11.40 - 12.60 | 3.3 | | 300 | 100 | 50 | 50 | 45 |
| NVI24S2V5/300D | 22.80 - 25.20 | 2.5 | | 300 | 100 | 50 | 50 | 45 |
| NVI24S3V3/300D | 22.80 - 25.20 | 3.3 | | 300 | 100 | 50 | 50 | 45 |
| NVI48S2V5/300D | 45.60 - 50.40 | 2.5 | | 300 | 100 | 50 | 50 | 45 |
| NVI48S3V3/300D | 45.60 - 50.40 | 3.3 | | 300 | 100 | 50 | 50 | 45 |

| NVI-D Series Pin Definition | | |
|-----------------------------|---------------------|---------------------|
| Pin No. | Single Output Power | Single Output Power |
| 2 | -Vin | -Vin |
| 3 | -Vin | -Vin |
| 22 | +Vin | +Vin |
| 23 | +Vin | +Vin |
| 9 | No Pin | GND |
| 11 | No Pin | Vout2 |
| 14 | Vout1 | Vout1 |
| 16 | GND | GND |



ALL DIMENSIONS IN INCHES(MM)