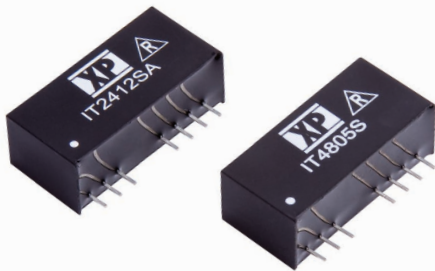


3 Watts IT Series



- Regulated Single & Dual Output
- Wide 4:1 Input Range
- SIP Package
- 1500 VDC Isolation
- -40 °C to 100 °C Operation
- Remote On/Off
- 3 Year Warranty

Specification

Input

- Input Voltage Range** • See table
- Input Reflected Ripple Current** • 20 mA pk-pk through 12 μ H inductor and 47 μ F capacitor, 5 Hz to 20 MHz
- Input Filter** • Capacitor
- Input Surge** • 24 V models: 50 VDC for 100 ms
48 V models: 100 VDC for 100 ms

Output

- Output Voltage** • See table
- Minimum Load** • None⁽¹⁾
- Line Regulation** • $\pm 0.5\%$ max
- Load Regulation** • $\pm 0.5\%$ max from 10-100% load⁽¹⁾
- Setpoint Accuracy** • $\pm 1\%$ max
- Ripple & Noise** • 50 mV pk-pk max, 20 MHz bandwidth
- Temperature Coefficient** • 0.02%/°C
- Short Circuit Protection** • Continuous with auto recovery (hiccup)
- Cross Regulation** • $\pm 5\%$ on dual output models⁽²⁾
- Remote On/Off** • Apply 2.7 to 15 VDC to pin 3 to turn output off

General

- Efficiency** • See table
- Isolation Voltage** • 1500 VDC
- Isolation Resistance** • 10⁹ Ω
- Isolation Capacitance** • 500 pF, max
- Switching Frequency** • 250 kHz typical
- MTBF** • >1.2 Mhrs to MIL-HDBK-217F at 25 °C, GB

Environmental

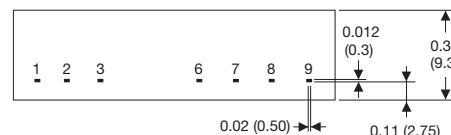
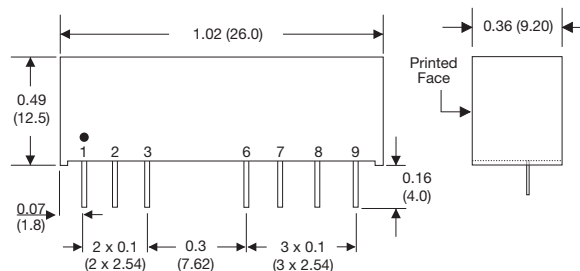
- Operating Temperature** • -40 °C to +100 °C, derate from 100% load at 75 °C to 0% load at 100 °C
- Storage Temperature** • -40 °C to +125 °C
- Case Temperature** • 100 °C max
- Cooling** • Convection cooled

Notes

1. Operation at no load will not damage the converter but may not meet all specifications.
2. When one output is set to 100% load and the other varies between 25%-100% load.
3. Pin pitch tolerance ± 0.014 (± 0.35)
4. Case tolerance ± 0.02 (0.5)
5. Weight: 0.014 lbs (6.5 g)
6. All dimensions in inches (mm)

| Input Voltage | Output Voltage | Output Current | No Load Input Current | Max Capacitive Load | Efficiency | Model Number |
|---------------|----------------|----------------|-----------------------|---------------------|------------|--------------|
| 9.0-36.0 V | 3.3 V | 700 mA | 10 mA | 2200 μ F | 77% | IT2403SA |
| | 5.0 V | 600 mA | 10 mA | 1000 μ F | 82% | IT2405SA |
| | 12.0 V | 250 mA | 10 mA | 165 μ F | 84% | IT2412SA |
| | 15.0 V | 200 mA | 10 mA | 100 μ F | 85% | IT2415SA |
| | ± 5.0 V | ± 300 mA | 10 mA | ± 470 μ F | 81% | IT2405S |
| | ± 12.0 V | ± 125 mA | 10 mA | ± 100 μ F | 84% | IT2412S |
| 18.0-75.0 V | ± 15.0 V | ± 100 mA | 10 mA | ± 47 μ F | 84% | IT2415S |
| | 3.3 V | 700 mA | 5 mA | 2200 μ F | 75% | IT4803SA |
| | 5.0 V | 600 mA | 8 mA | 1000 μ F | 81% | IT4805SA |
| | 12.0 V | 250 mA | 5 mA | 165 μ F | 84% | IT4812SA |
| | 15.0 V | 200 mA | 5 mA | 100 μ F | 84% | IT4815SA |
| | ± 5.0 V | ± 300 mA | 5 mA | ± 470 μ F | 81% | IT4805S |
| | ± 12.0 V | ± 125 mA | 5 mA | ± 100 μ F | 84% | IT4812S |
| | ± 15.0 V | ± 100 mA | 5 mA | ± 47 μ F | 83% | IT4815S |

Mechanical Details



| PIN CONNECTIONS | | | | | |
|-----------------|---------------|---------------|-----|-----------|-----------|
| Pin | Single | Dual | Pin | Single | Dual |
| 1 | -V Input | -V Input | 7 | N.C. | Common |
| 2 | +V Input | +V Input | 8 | N.C. | N.C. |
| 3 | Remote On/Off | Remote On/Off | 9 | -V Output | -V Output |
| 6 | +V Output | +V Output | | | |