

Features

- 3W Isolated Output
- Efficiency to 80%
- 2:1 input range
- Regulated Outputs
- Pi Input Filter
- Low Ripple and Noise
- 24-Pin DIP Package
- Continuous Short Circuit Protection
- Meets EN55022 Class B, Conducted
- Remote ON/OFF option



| Model Number ^{1, 2, 3, 4} | Input Voltage | Output Voltage | Output Current | Input Current | | Efficiency |
|------------------------------------|---------------|----------------|----------------|---------------|-----------|------------|
| | | | | No Load | Full Load | |
| VABD3-D12-S5 | 9-18VDC | 5VDC | 600mA | 7.5mA | 340mA | 73% |
| VABD3-D12-S12 | 9-18VDC | 12VDC | 250mA | 7.5mA | 320mA | 78% |
| VABD3-D12-S15 | 9-18VDC | 15VDC | 200mA | 7.5mA | 329mA | 76% |
| VABD3-D12-D5 | 9-18VDC | ±5VDC | ±300mA | 12mA | 340mA | 73% |
| VABD3-D12-D12 | 9-18VDC | ±12VDC | ±125mA | 12mA | 329mA | 76% |
| VABD3-D12-D15 | 9-18VDC | ±15VDC | ±100mA | 12mA | 333mA | 75% |
| VABD3-D12-S3R3 | 9-18VDC | 3.3VDC | 600mA | 7.5mA | 236mA | 70% |
| VABD3-D24-S5 | 18-36VDC | 5VDC | 600mA | 5mA | 168mA | 74% |
| VABD3-D24-S12 | 18-36VDC | 12VDC | 250mA | 5mA | 156mA | 80% |
| VABD3-D24-S15 | 18-36VDC | 15VDC | 200mA | 5mA | 156mA | 80% |
| VABD3-D24-D5 | 18-36VDC | ±5VDC | ±300mA | 7.5mA | 168mA | 74% |
| VABD3-D24-D12 | 18-36VDC | ±12VDC | ±125mA | 7.5mA | 156mA | 80% |
| VABD3-D24-D15 | 18-36VDC | ±15VDC | ±100mA | 7.5mA | 160mA | 78% |
| VABD3-D24-S3R3 | 18-36VDC | 3.3VDC | 600mA | 5mA | 113mA | 73% |
| VABD3-D48-S5 | 36-72VDC | 5VDC | 600mA | 2mA | 82mA | 76% |
| VABD3-D48-S12 | 36-72VDC | 12VDC | 250mA | 2mA | 82mA | 77% |
| VABD3-D48-S15 | 36-72VDC | 15VDC | 200mA | 2mA | 82mA | 77% |
| VABD3-D48-D5 | 36-72VDC | ±5VDC | ±300mA | 3mA | 82mA | 76% |
| VABD3-D48-D12 | 36-72VDC | ±12VDC | ±125mA | 3mA | 82mA | 76% |
| VABD3-D48-D15 | 36-72VDC | ±15VDC | ±100mA | 3mA | 82mA | 76% |
| VABD3-D48-S3R3 | 36-72VDC | 3.3VDC | 600mA | 3mA | 58mA | 71% |

NOTES:

1. Suffix "HM" for 1.5K Vdc isolation
2. Suffix "H" for 3K Vdc isolation
3. Suffix "-SMT" for SMT case style
4. Suffix "-1" for on/off control option



Input

| | | |
|---------------------|-----|---------|
| Input Voltage Range | 12V | 9-18V |
| | 24V | 18-36 |
| | 48V | 36-72 |
| Input Filter | | Pi Type |

Output

| | | |
|----------------------------|--------------------------|------------------|
| Voltage Accuracy | | ±2.0% max. |
| Voltage Balance(Dual) | | ±1.0% max. |
| Temperature Coefficient | | ±0.05% / °C max. |
| Ripple and Noise, 20MHz BW | 3.3V / 5V | 100mV p-p max. |
| | 12V / 15V | 1% p-p max. |
| Short Circuit Protection | | continuous |
| Line Regulation | single/dual ¹ | ±0.5% |
| Load Regulation | single ² | ±0.5% |
| | dual ³ | ±1.0% |

General Specifications

| | | |
|-----------------------------|---------------|-------------------------------------|
| Efficiency | | see table |
| Isolation Resistance | | 10 ⁹ Ohms |
| Switching Frequency | | 100kHz min. |
| Isolation Resistance | | 10 ⁹ Ohms |
| Operating Temperature Range | | -25°C to +71°C |
| Storage Temperature | | -40°C to +100°C |
| Case Temp.(Plastic case) | | 95°Cmax. |
| | (Copper case) | 100°Cmax. |
| Cooling | | Free Air Convection |
| EMI/RFI | | Conductive EMI Meet EN55022 Class B |
| Dimensions | | 1.25x0.8x0.5 inches |
| | | (31.8x20.3x12.7mm) |

Isolation Voltage

| | |
|-------------------------|--------------------|
| 500 VDC min | Standard Models |
| 1.5K VDC mon | Suffix "HM" Models |
| 3K VDC min ⁴ | Suffix "H" Models |

Case Material

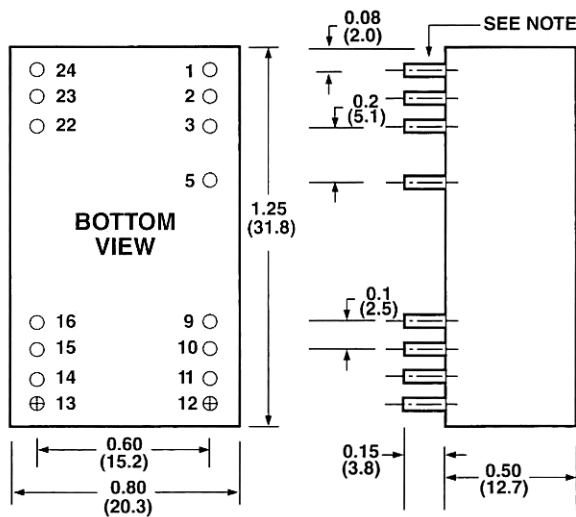
| | |
|--------------------------------|--|
| Standard models | Non-Conductive Black Plastic |
| Suffix "M" models ⁵ | Black Coated Copper with Non-Conductive Base |

NOTES:

1. Measured from high line to low line
2. Measured from full load to 10% load
3. Measured from full load to 1/4 load
4. Non-conductive black plastic only
5. Suffix "-1" to the model number with remote on/off for "H"/"HM" versions only

24-Pin DIP Case

NOTE: Pin Size is 0.02" Inch (0.5mm) DIA
 All Dimensions In Inches(mm)
 Tolerance .xx= ±.02, .xxx= ±.010


Remote On/Off Control

| | |
|-----------------------|----------------------------|
| Logic Compatibility | CMOS or Open Collector TTL |
| Ec-On | >+5.5 VDC or Open Circuit |
| Ec-Off | <1.8 VDC |
| Shutdown Idle Current | 10mA |
| Control Common | Referenced to Input Minus |

PIN CONNECTION

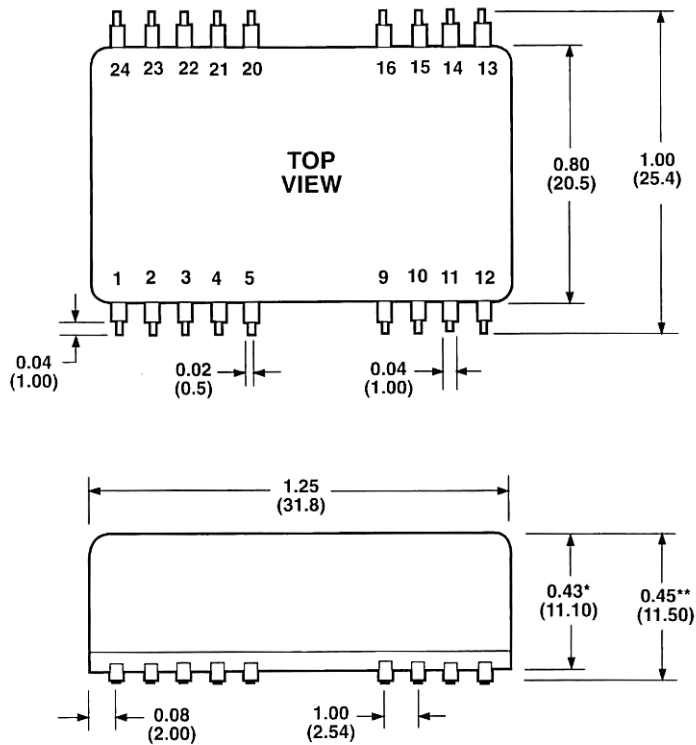
| Pin | 500 VDC | | Pin | 1.5K & 3K VDC | |
|-----|---------------|-------------|-----|--------------------|-------------|
| | Single Output | Dual Output | | Single Output | Dual Output |
| 1 | +V Input | +V Input | 1 | NP | NP |
| 2 | NC | -V Output | 2 | -V Input | -V Input |
| 3 | NC | Common | 3 | -V Input | -V Input |
| 5 | NP | NP | 5 | NP (Remote On/Off) | |
| 9 | NP | NP | 9 | NC | Common |
| 10 | -V Output | Common | 10 | NC | NC |
| 11 | +V Output | +V Output | 11 | NC | -V Output |
| 12 | -V Input | -V Input | 12 | NP | NP |
| 13 | -V Input | -V Input | 13 | NP | NP |
| 14 | +V Output | +V Output | 14 | +V Output | +V Output |
| 15 | -V Output | Common | 15 | NC | NC |
| 16 | NP | NP | 16 | -V Output | Common |
| 22 | NC | Common | 22 | +V Input | +V Input |
| 23 | NC | -V Output | 23 | +V Input | +V Input |
| 24 | +V Input | +V Input | 24 | NP | NP |

*NP-NO PIN

*NC-NO CONNECTION WITH PIN

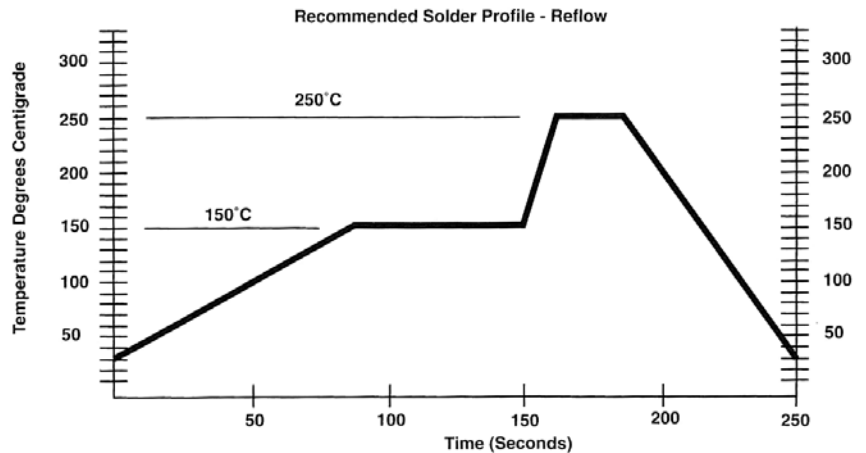
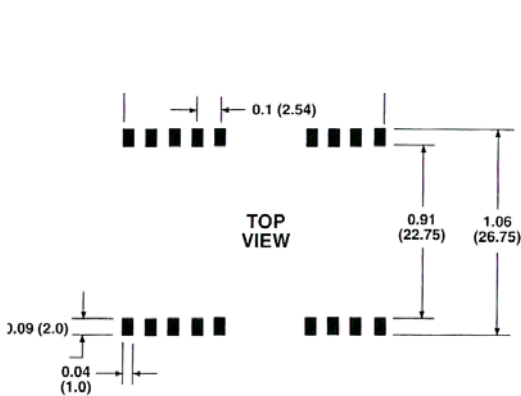
All specifications typical at nominal line, full load and 25°C unless otherwise noted.

SMT Case

 All Dimensions In Inches(mm)
 Tolerance .xx= ±.02, .xxx= ±.010


| Pin | PIN CONNECTION | | | |
|-----|----------------|-------------|-----------------------|-------------|
| | 500 VDC | | 1500 VDC | |
| | Single Output | Dual Output | Single Output | Dual Output |
| 1 | +V Input | +V Input | NC | NC |
| 2 | NC | -V Output | -V Input | -V Input |
| 3 | NC | Common | -V Input | -V Input |
| 4 | NC | NC | NC | NC |
| 5 | NC | NC | NC (or Remote ON/OFF) | NC |
| 9 | NC | NC | NC | Common |
| 10 | -V Output | Common | NC | NC |
| 11 | +V Output | +V Output | NC | -V Output |
| 12 | -V Input | -V Input | NC | NC |
| 13 | -V Input | -V Input | NC | NC |
| 14 | +V Output | +V Output | +V Output | +V Output |
| 15 | -V Output | Common | NC | NC |
| 16 | NC | NC | -V Output | Common |
| 20 | NC | NC | NC | NC |
| 21 | NC | NC | NC | NC |
| 22 | NC | Common | +V Input | +V Input |
| 23 | NC | -V Output | +V Input | +V Input |
| 24 | +V Input | +V Input | NC | NC |

*NC-NO CONNECTION WITH PIN



All specifications typical at nominal line, full load and 25°C unless otherwise noted.