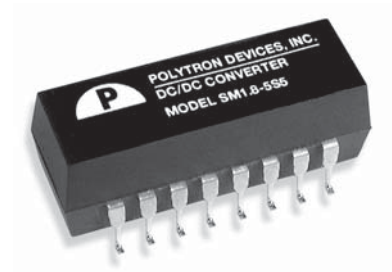




1.8 WATT SINGLE OUTPUT

Isolated, Low Profile
DC/DC Converters



FEATURES

- **Transfer Molded Type**
- **16-Pin SMD Package**
- **500 Vdc Input/Output Isolation**
- **Low Profile**
- **Compact Size**

SM1.8 Series

Specifications

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

INPUT

Voltage Range.....±5%, See Table
 Input Filter.....Internal Capacitor

OUTPUT

Voltage Accuracy.....±5% max.
 Line Regulation (at FL).....±5% max.
 Load Regulation (FL to 1/4 Load).....±5% max.
 Ripple Noise (20MHz Bw).....1% P-P max.
 Temperature Coefficient (at FL).....0.5%/°C max.
 Short Circuit Protection.....Momentary

GENERAL

Efficiency (at FL).....75% Typical
 Isolation Voltage.....500 Vdc
 Isolation Resistance.....1000MOhms
 Switching Frequency.....25KHz typ.

ENVIRONMENTAL

Operating Temperature Range.....-25° to +71°C
 Storage Temperature Range.....-40° to +105°C
 Derating.....None
 Cooling.....Free Air Convection
 Relative Humidity.....Up to 95% RH

PHYSICAL

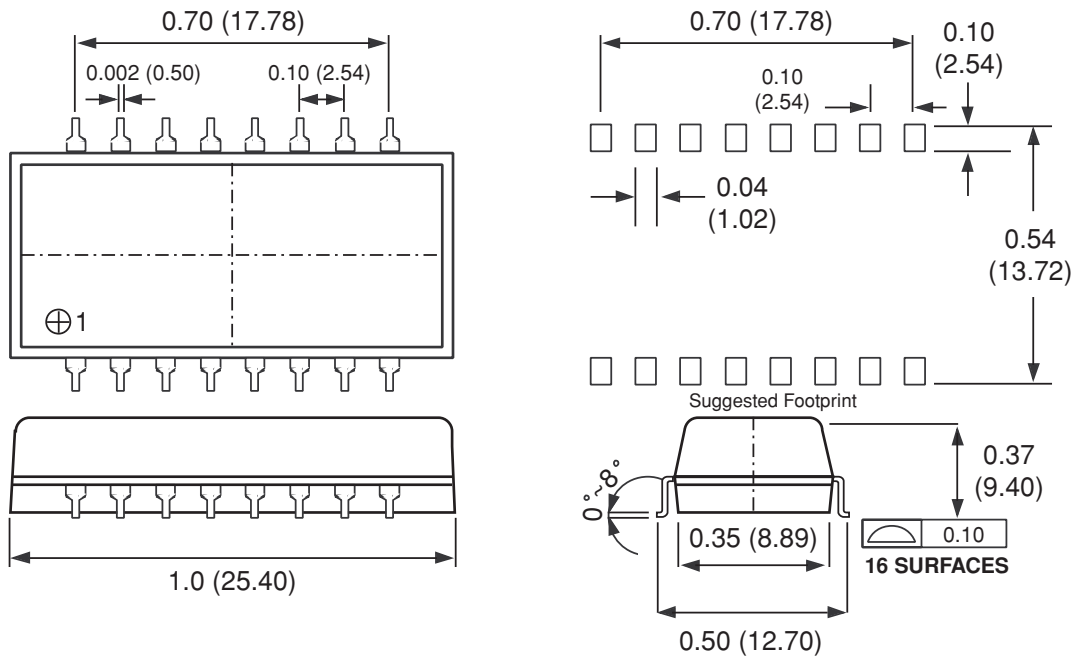
Case Material.....Non-Conductive Black Plastic
 Weight.....14 grams typical
 Dimensions.....1.00" x 0.54" x 0.37"
(26.4 x 13.72 x 9.40 mm)

Selection Guide

| SINGLE OUTPUT VOLTAGE | Input Voltage Nominal (Vdc) | Output Voltage (Vdc) | Output Current (mA, Max) | Input Current (mA) | | Efficiency % | Model Number | Package |
|-----------------------|-----------------------------|----------------------|--------------------------|--------------------|-----------|--------------|--------------|------------|
| | | | | No Load | Full Load | | | |
| 5 | | 5 | 360 | 30 | 515 | 70 | SM1.8-5S5 | 16 pin SMD |
| | | 9 | 200 | 30 | 480 | 75 | SM1.8-5S9 | 16 pin SMD |
| | | 12 | 150 | 30 | 480 | 75 | SM1.8-5S12 | 16 pin SMD |
| | | 15 | 120 | 30 | 480 | 75 | SM1.8-5S15 | 16 pin SMD |
| 12 | | 5 | 360 | 20 | 214 | 70 | SM1.8-12S5 | 16 pin SMD |
| | | 9 | 200 | 20 | 200 | 75 | SM1.8-12S9 | 16 pin SMD |
| | | 12 | 150 | 20 | 200 | 75 | SM1.8-12S12 | 16 pin SMD |
| | | 15 | 120 | 20 | 200 | 75 | SM1.8-12S15 | 16 pin SMD |

Mechanical Specifications

| I/O Connections | |
|-----------------|----------|
| PIN # | FUNCTION |
| 1 | -Vin |
| 3 | +Vin |
| 7 | +Vout |
| 8 | -Vout |



All Dimensions are in inches (mm)



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