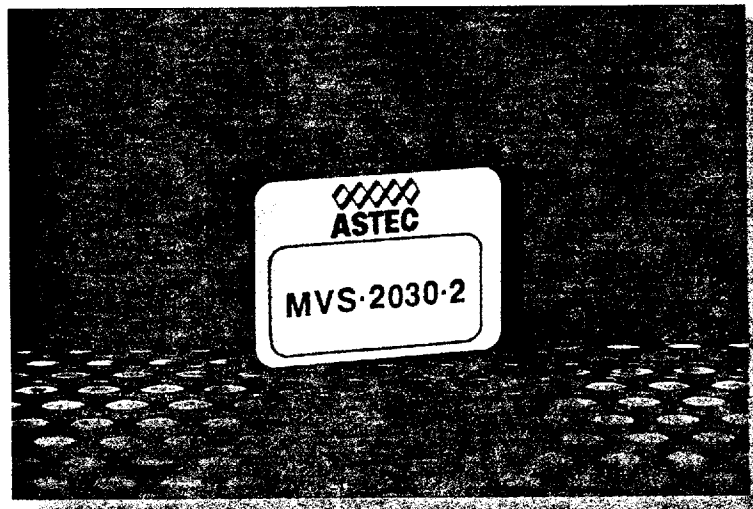


The MV Series is ideally suited for high density PC board applications, where real estate is at a premium. Applications include telecommunications, automatic test equipment, process control, etc.



Special Features Electrical Specifications

- MOSFET design
- Continuous short circuit protection
- 500 VDC I/O isolation
- Regulated outputs
- 24 pin DIP compatible packaging

The MV family is an economically priced high performance series of regulated DC/DC converters, offering single and dual outputs. Features include MOSFET design operating at a switching frequency of 200 kHz, continuous short circuit protection, LC input filter, and 500 VDC I/O isolation. These miniature converters maintain excellent regulation over varying line and load conditions. They are packaged in an IC compatible 24 pin DIP configuration, measuring 1.25" x 0.8" x 0.4" high.

Input	
Vin - nominal	5 VDC
Voltage range	± 5%
Reflected ripple	20 mA p-p (typ. at full load)
Input filtering	LC
Output	
Voltage tolerance	± 5% (max)
Ripple and noise	20 mV p-p (max)*
Short circuit protection	Continuous, auto restart
Temperature coefficient	0.02% / °C max

General	
Regulation:	
Line	0.2%
Load	0.5%
Efficiency	60% (typ)
I/O isolation	500 Vdc
Switching frequency	200 kHz

Environmental Notes

Operating temperature range: -25°C to +71°C	* Measured with 3.3 µF 25 V tantalum capacitor across each output.
Storage temperature: -40°C to +85°C	All specifications are typical at nominal line and full load at +25°C unless otherwise noted.
Cooling: Free air convection	Specifications subject to change without notice.

DC/DC
 Converters
 2.4 Watts
 MV Series



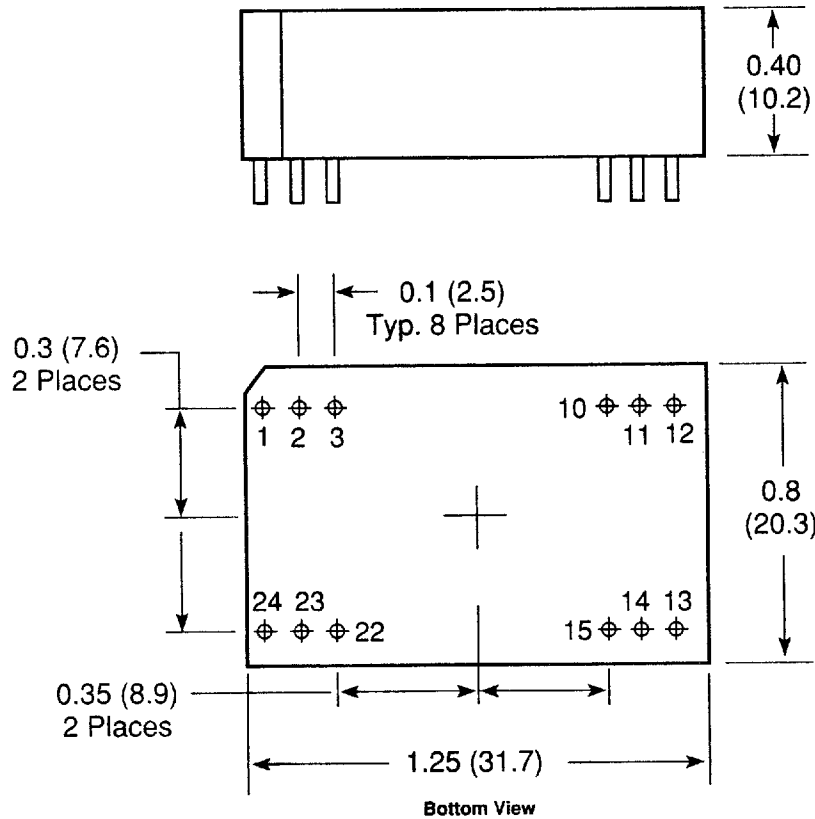
ASTEC STANDARD POWER
Division of Astec America Inc.
401 Jones Road
Oceanside, CA 92054-1216
Telephone: 619-757-1880
Facsimile: 619-439-4243

ASTEC STANDARD POWER EUROPE
A Division of Astec Europe Limited
Unit 2B, Carlisle Close, Sheffield Road
Chesterfield S41 9ED, UK
Telephone: 0246-455946
Facsimile: 0246-450428

Ordering Information

	Input Voltage	Output Voltage	Maximum Current 50°C	60°C	70°C	Model Number	SCI Equivalent Model Number	Regulation % Line ± Load ±
Single	4.75 - 5.25 V	5 Vdc	300 mA	300 mA	300 mA	MVS2030-2	DP11-030-5	0.2 0.5
	4.75 - 5.25 V	9 Vdc	200 mA	200 mA	200 mA	MVS7020-2	DP19-020-5	0.2 0.5
	4.75 - 5.25 V	12 Vdc	200 mA	200 mA	175 mA	MVS3020-2	DP12-020-5	0.2 0.5
	4.75 - 5.25 V	15 Vdc	160 mA	140 mA	120 mA	MVS4016-2	DP13-016-5	0.2 0.5
Dual	4.75 - 5.25 V	± 5 Vdc	200 mA	200 mA	200 mA	MVD2020-2	DP21-020-5	0.2 0.5
	4.75 - 5.25 V	± 12 Vdc	85 mA	85 mA	80 mA	MVD3017-2	DP22-017-5	0.2 0.5
	4.75 - 5.25 V	± 15 Vdc	70 mA	70 mA	65 mA	MVD4014-2	DP23-014-5	0.2 0.5

Drawings



Pin Assignments

Single Output

Pin 1 & 24 +Vdc in
Pin 2 & 23 NC
Pin 3 & 22 -Vdc out
Pin 10 & 15 -Vdc out
Pin 11 & 14 +Vdc out
Pin 12 & 13 -Vdc in

Dual Output

Pin 1 & 24 +Vdc in
Pin 2 & 23 -Vdc out
Pin 3 & 22 Common out
Pin 10 & 15 Common out
Pin 11 & 14 +Vdc out
Pin 12 & 13 -Vdc in

Notes

1. All dimensions are in inches and (mm).
2. Twelve pins 0.018 (0.5) square x 0.15 (3.8) Lg Min.