

QA Series



DC/DC

5 Watts

Single/Dual Outputs

- Industry standard form factor 2 x 1 x 0.40
- Wide input voltage range
4.5-5.25 Vdc
9-36 Vdc
20-72 Vdc
- 200kHz switching frequency
- Continuous short circuit protection
- Six-sided shielding
- UL1950 Recognized

Specifications

INPUT

Voltage Range	4.5-5.25 Vdc 9-36 Vdc 20-72 Vdc
Reverse Polarity Protected	To Nominal Input Current External Fuse Required

OUTPUT

Voltage Tolerance	± 2%
Ripple and Noise	1% of Rated Output (typ)
Short Circuit Protection	Continuous Power Cycle
Temperature Coefficient	0.02% / °C

GENERAL

Regulation:	
Line	0.5%
Load	1.0%
Switching Frequency	200 kHz
Efficiency	75% (typ)
I/O Isolation	500 Vdc

ENVIRONMENTAL

Operating Temperature	-25°C to +71°C
Max Baseplate Temp	105°C
Storage Temperature	-40°C to +105°C
Cooling	Free-air Convection

All specifications are typical at nominal line and full load at 25°C unless otherwise noted and are subject to change without notice.

The QA series of cost sensitive single and dual output 5 watt DC/DC converters are specifically designed for critical applications requiring a compact, low profile case.

These high performance 5 watt converters offer a high switching frequency topology, 500 Vdc I/O isolation, and efficiencies to 75%.

Fifteen models available; Three input voltage ranges of 4.5-5.25 Vdc, 9-36 Vdc, and 20-72 Vdc provide regulated outputs of 5, 12, 15 and ±12 and ±15 Vdc.

Applications

These units are ideally suited for telecommunications, distributed power systems, automatic test equipment, medical and process control.



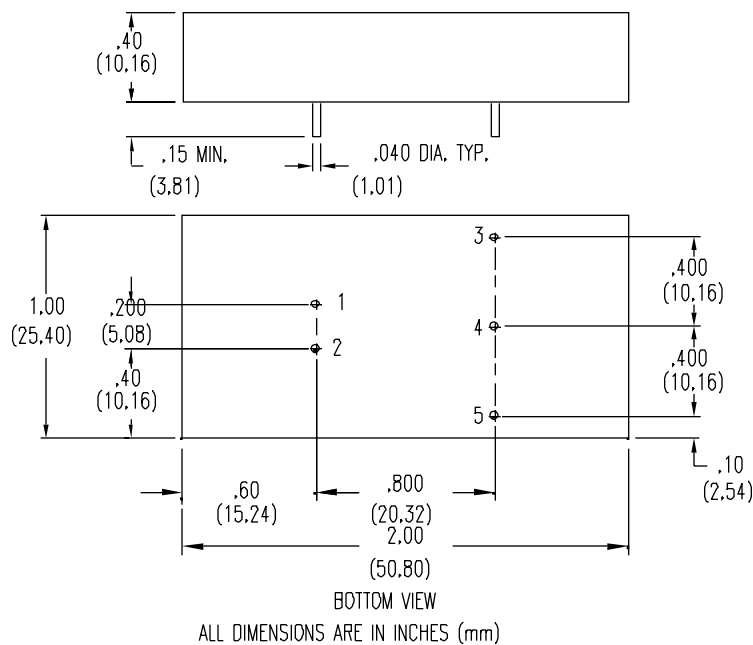
**SEMICONDUCTOR
CIRCUITS, INC.**

800-438-3232 800-GET.DCDC

QA Series Ordering Information

Input Voltage Range	Output Voltage	Output Current	Model Number
4.5-5.25 Vdc	5 Vdc	1000 mA	QA11-075-05
4.5-5.25 Vdc	12 Vdc	420mA	QA12-037-05
4.5-5.25 Vdc	15 Vdc	330mA	QA13-030-05
4.5-5.25 Vdc	±12 Vdc	±210mA	QA22-037-05
4.5-5.25 Vdc	±15 Vdc	±160mA	QA23-030-05
9-36 Vdc	5 Vdc	1000mA	QA11-075-18
9-36 Vdc	12 Vdc	420mA	QA12-037-18
9-36 Vdc	15 Vdc	330mA	QA13-030-18
9-36 Vdc	±12 Vdc	±210mA	QA22-037-18
9-36 Vdc	±15 Vdc	±160mA	QA23-030-18
20-72 Vdc	5 Vdc	1000mA	QA11-075-48
20-72 Vdc	12 Vdc	420mA	QA12-037-48
20-72 Vdc	15 Vdc	330mA	QA13-030-48
20-72 Vdc	±12 Vdc	±210mA	QA22-037-48
20-72 Vdc	±15Vdc	±160mA	QA23-030-48

Dimensions and Connections



PIN CONNECTIONS

Single Output

1. +Input
2. -Input
3. + Output
4. No Pin
5. - Output

PIN CONNECTIONS

Dual Outputs

1. +Input
2. -Input
3. + Output
4. Common
5. - Output

NOTES:

1. Ripple measured with a 3.3 mf tantalum capacitor across each output.
2. Case connected to pin #1 on -48 models. Case connected to pin #2 on -05 and -18 models

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