RSZ Series

1 W DC/DC Converters - SMD Miniature, Regulated, Single Output

CoolPower Solutions

Selection Guide

Part Number SMD 2kVDC	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)
Standard			
RSZ-XXXX (H)	5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	Depending on Output Voltage
With Short Circuit Protection			
RSZ-XX03P (H)	5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28	3	200
RSZ-XX3.3P (H)	5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28	3.3	200
RSZ-XX4.85P (H)	5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28	4.85	200
RSZ-XX05P (H)	5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28	5	200

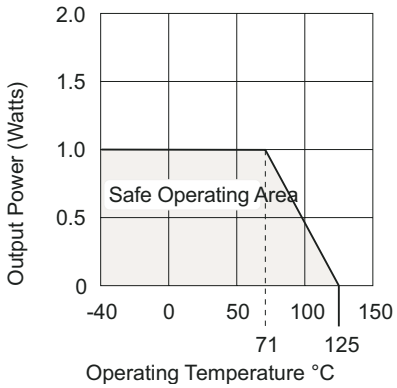
Ordering Example: RSZ-0414 (4VDC Input, 14VDC Output)
RSZ-244.85P (with Short Circuit Protection, 24VDC Input, 4.85VDC Output)

Features

- Regulated Output
- 1kVDC (2kVDC) Isolation
- Single Isolated Output
- SMD Package Style
- UL 94V-0 Package Material
- No Heatsink Required
- Toroidal Magnetics
- No Extern. Components Required
- Short Circuit Protection – Continuous (for „P-Suffix“ part numbers only)

Specifications (Core Operating Area) and Operating Temperature / Derating-Graph

Input Voltage Range	±5%
Output Voltage Accuracy	±2%
Line Voltage Regulation	1% max.
Load Voltage Regulation	1% max.
Output Ripple and Noise (at 20MHz BW)	100mVp-p max.
Efficiency at Full Load	50% min.
Isolation Voltage („H“ suffix for 2000 VDC)	1.000VDC min.
Short Circuit Protection (P-Suffix)	1 Second (Continuous)
Operating Temperature Range	-40°C to +71°C (see Graph)
Storage Temperature Range	-55°C to +125°C
Isolation Capacitance	50pF
Insulation Resistance	10 G min.
MTBF (+25°C)	500k Hrs. min.



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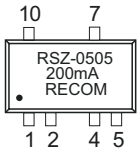
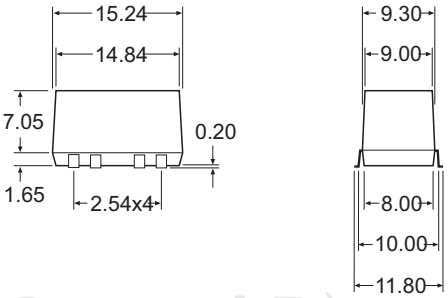
Package Style and Pinning (mm)

3rd angle projection

SMD Package

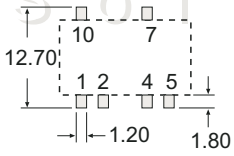




Pin Connections

Pin #	Function
1	–Vin
2	+Vin
4	0V
5	0V
7	+Vout
10	NC

Recommended Footprint Details



Tolerance:
XX.X ± 0.5 mm
XX.XX ± 0.25 mm

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