

RS2/RD2-E10/T10

1.0 Watt unregulated
dual separate & dual split output



SIL 7 package, pic. similar

OUTPUT SPECIFICATIONS

Voltage accuracy	± 3%
Line regulation (Per 1% Vin Change)	± 1.2%
Load regulation (From 20% to 100% Load)	± 10%
(Output 3.3 V Model)	± 20%
Ripple & Noise (20 MHz bandwidth) (1)	75 mV pk-pk
Temperature coefficient	± 0.02%/°C
Capacitor load (2)	See table

INPUT SPECIFICATIONS

Voltage range	± 10%
Max. input current	See table
No-load input current	See table
Input filter	Capacitors
Input reflected ripple current (3)	20 mA pk-pk

GENERAL SPECIFICATIONS

Efficiency	See table
I/O isolation voltage (3 sec.)	
Input / output 1 & output 2	1000 ~ 3000 VDC
Output 1/output 2	1000 VDC
I/O isolation capacitance	60 pF typ.
I/O isolation resistance	1000 M Ohm
Switching frequency	variable 80 kHz
Humidity	95% rel. H
Reliability calculated MTBF (MIL-HDBK-217F)	> 1.121 Mhrs.
Safety standard (designed to meet)	IEC 60950-1

PHYSICAL SPECIFICATIONS

Case material	Non-conductive black plastic (UL94V-0 rated)
Pin material	0.5 mm Alloy42 solder-coated
Potting material	Epoxy (UL94V-0 rated)
Weight	SIP 2.3 g, DIP 2.6 g
Dimensions	SIP 0.76" x 0.24" x 0.39" DIP 0.80" x 0.40" x 0.27"

ENVIRONMENT SPECIFICATIONS

Operating temperature	-40°C ~ 85°C (See derating curve)
Maximum case temperature	100°C
Storage temperature	-40°C ~ 125°C
Cooling	Nature convection

- 7 Pin SIP7 / 14 Pin DIP14 package
- 1000 VDC isolation up to 3000 VDC isolation
- Low ripple and noise
- Efficiency up to 80%
- -40°C~85°C operation temperature range
- Non-conductive black plastic case

ABSOLUTE MAXIMUM RATINGS (4)

These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term reliability.

Input voltage (100 mS)

5 modes	0 ~ 7 VDC
12 modes	0 ~ 15 VDC
24 modes	0 ~ 28 VDC
48 modes (SIP)	0 ~ 54 VDC

Lead soldering temperature 260°C

(1.5 mm from case 10 sec.)

All specifications typical at Ta = 25°C, nominal input voltage and full load unless otherwise specified.

The information and specifications contained in this data sheet are believed to be correct at time of publication. However, we accept no responsibility for consequences arising from printing errors or inaccuracies. Subject to change without notice.

NOTE

- 1) Ripple / Noise measured with 20 MHz bandwidth.
- 2) Tested by minimal Vin and constant resistive load.
- 3) Measured input reflected ripple current with a simulated source inductance of 12uH.
- 4) Exceeding the absolute ratings of the unit could cause damage. It is not allowed for continuous operating.
- 5) Operation under no-load conditions will not damage these devices. However they may not meet all listed specifications.

The models listed are just for standard type. If you need a special specification product, please contact our service. Phone: +49 69 984047-0, mail to: info@rsg-electronic.de or use the forms on www.rsg-electronic.de („Kontakt“).

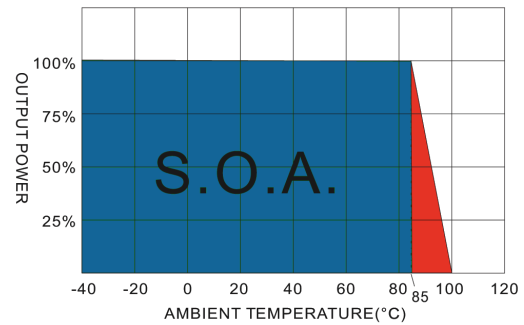
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NUMBER STRUCTURE

RS2	-	XX	XX	E/T	10	A	X
Name/Package		Input		Type	Power	Code	Isolation
RS2=SIL7 RD2=DIL14		05=5V 12=12V 24=24V 48=48V		E=Dual separate, T=Dual split output	10=1.0W	internal	1=1.0 kVDC 3=3.0 kVDC
Dual separate/Dual split output voltage							
03T10AX=5V, 3.3V				05E10AX=5V, 5V			
07T10AX=5V, 7.2V				07E10AX=7.2V, 7.2V			
09T10AX=5V, 9V				09E10AX=9V, 9V			
12T10AX=5V, 12V				12E10AX=12V, 12V			
15T10AX=5V, 15V				15E10AX=15V, 15V			

DERATING CURVE



MODEL SELECTION GUIDE

Model Number	Input Range VDC	Input current (mA) No Load / Full Load	Output VDC Out 1 , Out 2	Output current Full Load (mA) Out 1 , Out 2	Efficiency @FL (%)	Capacitor Load (μF)
RS2-0503T10AX	5	25 / 259	5 , 3.3	100 , 152	77	100
RS2-0507T10AX	5	25 / 266	5 , 7.2	100 , 69	75	100
RS2-0509T10AX	5	25 / 259	5 , 9	100 , 56	77	100
RS2-0512T10AX	5	25 / 259	5 , 12	100 , 42	77	100
RS2-0515T10AX	5	25 / 256	5 , 15	100 , 33	78	100
RS2-1203T10AX	12	15 / 106	5 , 3.3	100 , 152	78	100
RS2-1207T10AX	12	15 / 111	5 , 7.2	100 , 69	75	100
RS2-1209T10AX	12	15 / 108	5 , 9	100 , 56	77	100
RS2-1212T10AX	12	15 / 92	5 , 12	100 , 42	80	100
RS2-1215T10AX	12	15 / 106	5 , 15	100 , 33	78	100
RS2-2403T10AX	24	8 / 55	5 , 3.3	100 , 152	75	100
RS2-2407T10AX	24	8 / 55	5 , 7.2	100 , 69	75	100
RS2-2409T10AX	24	8 / 54	5 , 9	100 , 56	77	100
RS2-2412T10AX	24	8 / 53	5 , 12	100 , 42	78	100
RS2-2415T10AX	24	8 / 53	5 , 15	100 , 33	78	100
RD2-0503T10AX	5	25 / 259	5 , 3.3	100 , 152	77	100
RD2-0507T10AX	5	25 / 266	5 , 7.2	100 , 69	75	100
RD2-0509T10AX	5	25 / 259	5 , 9	100 , 56	77	100
RD2-0512T10AX	5	25 / 259	5 , 12	100 , 42	77	100
RD2-0515T10AX	5	25 / 256	5 , 15	100 , 33	78	100
RD2-1203T10AX	12	15 / 106	5 , 3.3	100 , 152	78	100
RD2-1207T10AX	12	15 / 111	5 , 7.2	100 , 69	75	100
RD2-1209T10AX	12	15 / 108	5 , 9	100 , 56	77	100
RD2-1212T10AX	12	15 / 92	5 , 12	100 , 42	80	100
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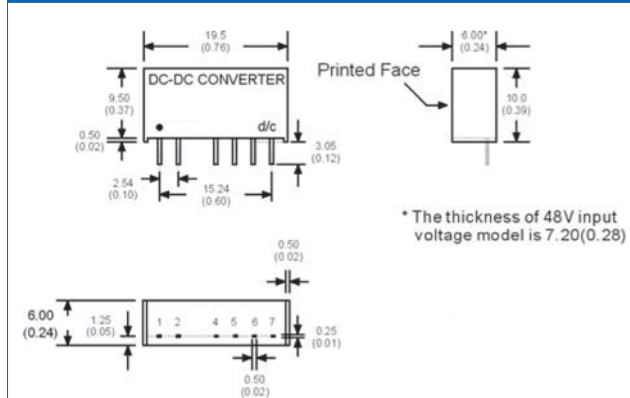
Model Number	Input Range VDC	Input current (mA) No Load / Full Load	Output VDC Out 1 , Out 2	Output current Full Load (mA) Out 1 , Out 2	Efficiency @FL (%)	Capacitor Load (μF)
RS2-0505E10AX	5	25 / 266	5 , 5	100 , 100	75	100
RS2-0507E10AX	5	25 / 259	7.2 , 7.2	69 , 69	77	100
RS2-0509E10AX	5	25 / 253	9 , 9	56 , 56	79	100
RS2-0512E10AX	5	25 / 250	12 , 12	42 , 42	80	100
RS2-0515E10AX	5	25 / 243	15 , 15	33 , 33	82	100
RS2-1205E10AX	12	15 / 111	5 , 5	100 , 100	75	100
RS2-1207E10AX	12	15 / 108	7.2 , 7.2	69 , 69	77	100
RS2-1209E10AX	12	15 / 108	9 , 9	56 , 56	77	100
RS2-1212E10AX	12	15 / 104	12 , 12	42 , 42	80	100
RS2-1215E10AX	12	15 / 102	15 , 15	33 , 33	81	100
RS2-2405E10AX	24	8 / 55	5 , 5	100 , 100	75	100
RS2-2407E10AX	24	8 / 54	7.2 , 7.2	69 , 69	77	100
RS2-2409E10AX	24	8 / 52	9 , 9	56 , 56	79	100
RS2-2412E10AX	24	8 / 50	12 , 12	42 , 42	82	100
RS2-2415E10AX	24	8 / 50	15 , 15	33 , 33	82	100
RD2-0505E10AX	5	25 / 266	5 , 5	100 , 100	75	100
RD2-0507E10AX	5	25 / 259	7.2 , 7.2	69 , 69	77	100
RD2-0509E10AX	5	25 / 253	9 , 9	56 , 56	79	100
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RD2-2405E10AX	24	8 / 55	5 , 5	100 , 100	75	100
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RD2-2415E10AX	24	8 / 50	15 , 15	33 , 33	82	100



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MECHANICAL SPECIFICATIONS 7 Pin SIL

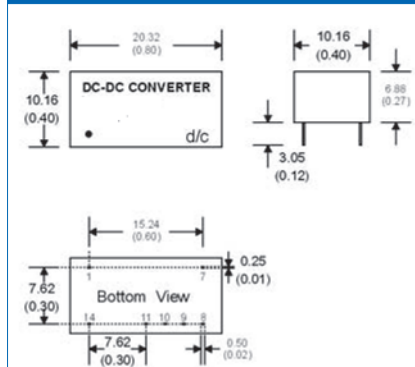


PIN CONNECTIONS SIL 7

PIN NUMBER	Dual separate
1	+ V Input
2	- V Input
4	+ V1 Output
5	- V1 Output
6	+ V2 Output
7	- V2 Output

Note: The Pin connections of High Isolation models are the same

MECHANICAL SPECIFICATIONS 14 Pin DIL



PIN CONNECTIONS DIL 14

PIN NUMBER	Dual separate
1	- V Input
7	N.C.
8	- V2 Output
9	+ V2 Output
10	- V1 Output
11	+ V1 Output
14	+ V Input

Note: The Pin connections of High Isolation models are the same

Notes:

All dimensions are typical in millimeters (inches).

- 1) Pin diameter: 0.5 ± 0.05 (0.02 ± 0.002)
- 2) Pin pitch tolerance: ± 0.35 (± 0.014)
- 3) Case tolerance: ± 0.5 (± 0.02)