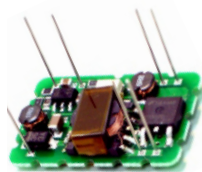


# RR4-S06/D06

6 Watt 2:1 regulated  
single & dual output



- DIP24, wide 2:1 input range
- Full SMD technology
- 1500 VDC isolation up to 3500 VDC isolation
- Continuous short circuit protection
- Efficiency up to 83%
- -40°C~85°C operation temperature range
- Optional plastic case

## OUTPUT SPECIFICATIONS

Voltage accuracy	± 1%
Line regulation	± 0.5%
Load regulation	± 0.5%
(Output 3.3 V Model)	± 1.5%
Ripple & Noise (20 MHz bandwidth) (1)	60 mV pk-pk
Short circuit protection	Indefinite (automatic recovery)
Temperature coefficient	± 0.02%/°C
Capacitor load (2)	See table

## INPUT SPECIFICATIONS

Voltage range	See table
Max. input current	See table
No-load input current	See table
Input filter	PI Type
Input reflected ripple current (3)	35 mA pk-pk

## GENERAL SPECIFICATIONS

Efficiency	See table
I/O isolation voltage (3 sec.)	
Input / output	1500 ~ 3500 VDC
Metal case / input & output	1000 VDC
I/O isolation capacitance	470 pF typ.
I/O isolation resistance	1000 M Ohm
Switching frequency	typ. 266 kHz
Humidity	95% rel. H
Reliability calculated MTBF (MIL-HDBK-217F)	> 1.121 Mhrs.
Safety standard (designed to meet)	IEC 60950-1:2001

## PHYSICAL SPECIFICATIONS

Case material	Nickel-coated copper Non-conductive black plastic (UL94V-0 rated)
Base material	Non-conductive black plastic (UL94V-0 rated)
Pin material	Ø 0.5 mm brass solder-coated
Potting material	Epoxy (UL94V-0 rated)
Weight	Metal 17 g, plastic 13.5 g
Dimensions	1.25" x 0.8" x 0.4"

## ENVIRONMENT SPECIFICATIONS

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

## 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)	
12 modes	-0.7 ~ 24 VDC
24 modes	-0.7 ~ 40 VDC
48 modes	-0.7 ~ 80 VDC

Lead soldering temperature	260°C
(1.5 mm from case 10 sec.)	

All specifications typical at  $T_a = 25^\circ\text{C}$ , 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.

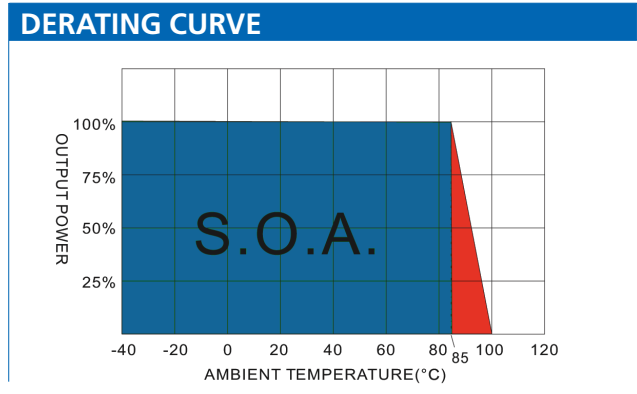
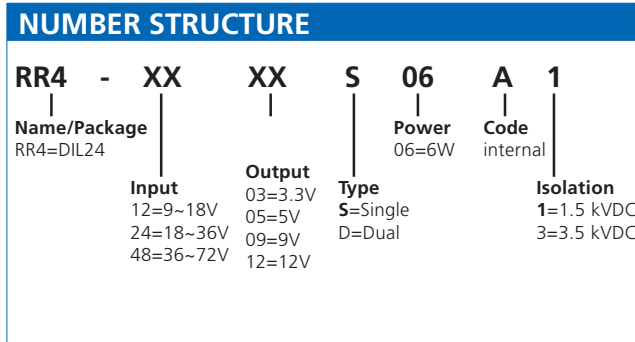
## NOTE

- 1) Typical value at nominal input voltage and full load.
- 2) Tested by nominal  $V_{in}$  and constant resistive load.
- 3) Measured input reflected ripple current with a simulated source inductance of 12µH.
- 4) Exceeding the absolute ratings of the unit could cause damage. It is not allowed for continuous operating.

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](mailto:info@rsg-electronic.de) or use the forms on [www.rsg-electronic.de](http://www.rsg-electronic.de) („Kontakt“).

# RR4-S06/D06

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single & dual output



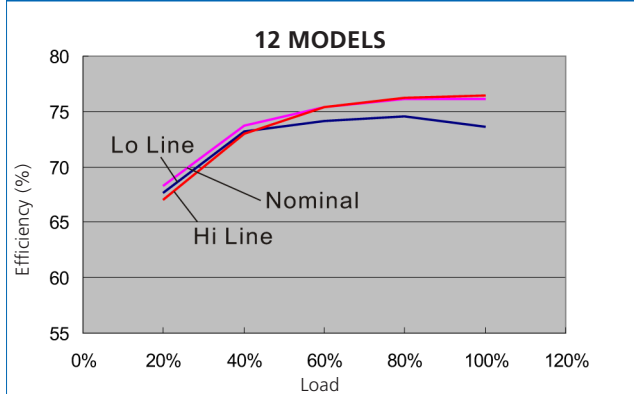
## MODEL SELECTION GUIDE

Model Number	Input Range VDC	Input current (mA) No Load / Full Load	Output VDC	Output current Full Load (mA)	Efficiency @FL (%)	Capacitor Load (μF)
RR4-1203S06AX	9-18	30 / 527	3.3	1400	73	1000
RR4-1205S06AX	9-18	30 / 649	5	1200	77	1000
RR4-1209S06AX	9-18	30 / 641	9	666	78	680
RR4-1212S06AX	9-18	30 / 617	12	500	81	330
RR4-1215S06AX	9-18	30 / 625	15	400	80	220
RR4-1224S06AX	9-18	30 / 625	24	250	80	68
RR4-1203D06AX	9-18	30 / 527	±3.3	±909	73	±680
RR4-1205D06AX	9-18	30 / 649	±5	±600	77	±330
RR4-1209D06AX	9-18	30 / 625	±9	±333	80	±220
RR4-1212D06AX	9-18	30 / 625	±12	±250	80	±100
RR4-1215D06AX	9-18	30 / 632	±15	±200	79	±47
RR4-1224D06AX	9-18	30 / 625	±24	±125	80	±33
RR4-2403S06AX	18-36	20 / 256	3.3	1400	75	1000
RR4-2405S06AX	18-36	20 / 313	5	1200	80	1000
RR4-2409S06AX	18-36	20 / 304	9	666	82	680
RR4-2412S06AX	18-36	20 / 313	12	500	80	330
RR4-2415S06AX	18-36	20 / 304	15	400	82	220
RR4-2424S06AX	18-36	20 / 305	24	250	82	68
RR4-2403D06AX	18-36	20 / 333	±3.3	±909	75	±680
RR4-2405D06AX	18-36	20 / 321	±5	±600	78	±330
RR4-2409D06AX	18-36	20 / 301	±9	±333	83	±220
RR4-2412D06AX	18-36	20 / 312	±12	±250	80	±100
RR4-2415D06AX	18-36	20 / 312	±15	±200	80	±47
RR4-2424D06AX	18-36	20 / 312	±24	±125	80	±33
RR4-4803S06AX	36-72	12 / 128	3.3	1400	75	1000
RR4-4805S06AX	36-72	12 / 156	5	1200	80	1000
RR4-4809S06AX	36-72	12 / 152	9	666	82	680
RR4-4812S06AX	36-72	12 / 156	12	500	80	330
RR4-4815S06AX	36-72	12 / 151	15	400	83	220
RR4-4824S06AX	36-72	12 / 151	24	250	83	68
RR4-4803D06AX	36-72	12 / 171	±3.3	±909	73	±680
RR4-4805D06AX	36-72	12 / 158	±5	±600	79	±330
RR4-4809D06AX	36-72	12 / 158	±9	±333	79	±220
RR4-4812D06AX	36-72	12 / 156	±12	±250	80	±100
RR4-4815D06AX	36-72	12 / 156	±15	±200	80	±47
RR4-4824D06AX	36-72	12 / 156	±24	±125	80	±33

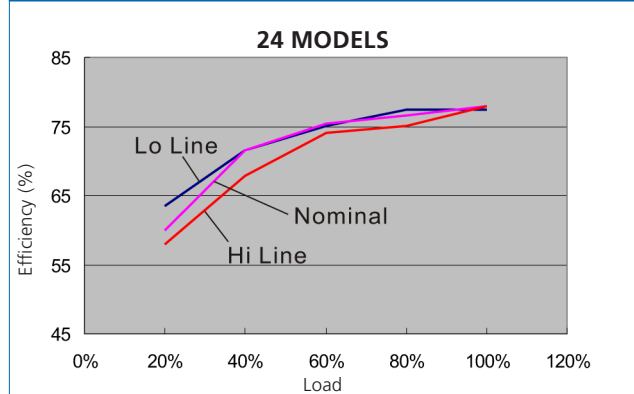
# RR4-S06/D06

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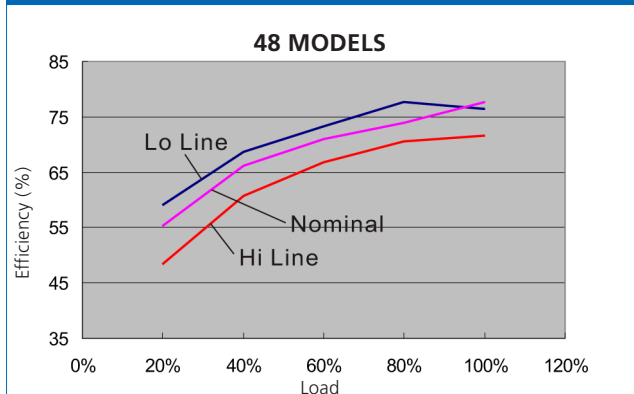
## EFFICIENCY VS OUTPUT CURRENT 12



## EFFICIENCY VS OUTPUT CURRENT 24



## EFFICIENCY VS OUTPUT CURRENT 48

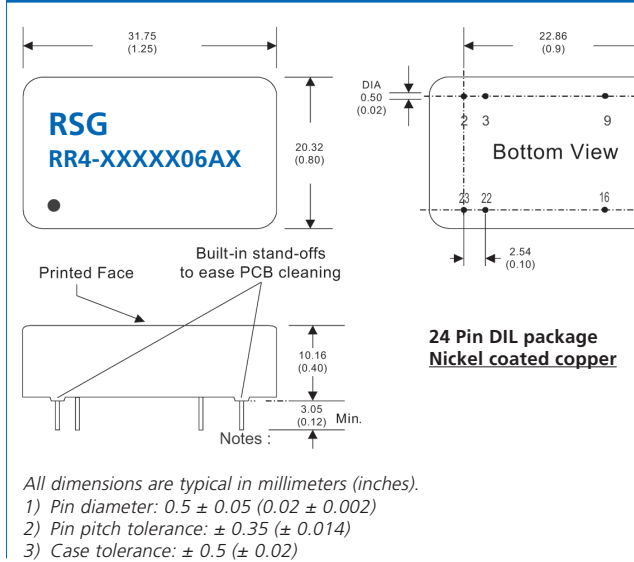


## PIN CONNECTIONS

Copper and Plastic models / High isolation same as normal

Pin Number	Single	Dual
2	-V Input	-V Input
3	-V Input	-V Input
9	N.P.	Common
11	N.C.	-V Output
14	+V Output	+V Output
16	-V Output	Common
22	+V Input	+V Input
23	+V Input	+V Input

## MECHANICAL SPECIFICATIONS COPPER



## MECHANICAL SPECIFICATIONS PLASTIC

