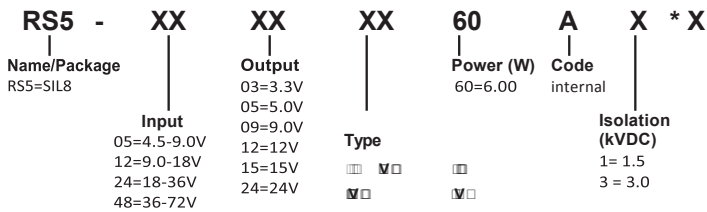
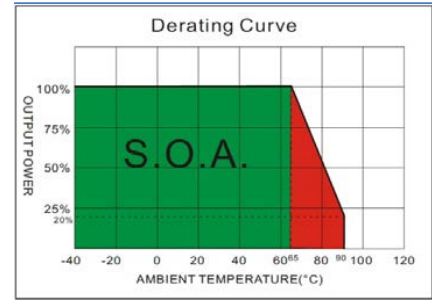




**NUMBER STRUCTURE**



\* Optional  
C = Control Pin



**MODEL SELECTION GUIDE**

MODEL NUMBER	INPUT Voltage Range (Vdc)	INPUT Current		OUTPUT Voltage (Vdc)	OUTPUT Current		EFFICIENCY @FL(%)	Capacitor Load(µF)
		No-Load (mA)	Full Load (mA)		Min. load (mA)	Full load (mA)		
RS5-0503R60A1	4.5-9	105	1144	3.3	0	1300	75	6600µF
RS5-0505R60A1	4.5-9	105	1519	5	0	1200	79	3300µF
RS5-0509R60A1	4.5-9	105	1445	9	0	666	83	2000µF
RS5-0512R60A1	4.5-9	105	1428	12	0	500	84	1600µF
RS5-0515R60A1	4.5-9	105	1428	15	0	400	84	1400µF
RS5-0524R60A1	4.5-9	105	1428	24	0	250	84	680µF
RS5-0505RD60A1	4.5-9	105	1481	±5	0	±600	81	±2000µF
RS5-0512RD60A1	4.5-9	105	1428	±12	0	±250	84	±900µF
RS5-0515RD60A1	4.5-9	105	1428	±15	0	±200	84	±660µF
RS5-1203R60A1	9-18	55	470	3.3	0	1300	76	6600µF
RS5-1205R60A1	9-18	55	602	5	0	1200	83	3300µF
RS5-1209R60A1	9-18	55	595	9	0	666	84	2000µF
RS5-1212R60A1	9-18	55	588	12	0	500	85	1600µF
RS5-1215R60A1	9-18	55	588	15	0	400	85	1400µF
RS5-1224R60A1	9-18	55	581	24	0	250	86	680µF
RS5-1205RD60A1	9-18	55	609	±5	0	±600	82	±2000µF
RS5-1212RD60A1	9-18	55	595	±12	0	±250	84	±900µF
RS5-1215RD60A1	9-18	55	581	±15	0	±200	86	±660µF
RS5-2403R60A1	18-36	30	229	3.3	0	1300	78	6600µF
RS5-2405R60A1	18-36	30	301	5	0	1200	83	3300µF
RS5-2409R60A1	18-36	30	294	9	0	666	85	2000µF
RS5-2412R60A1	18-36	30	294	12	0	500	85	1600µF
RS5-2415R60A1	18-36	30	287	15	0	400	87	1400µF
RS5-2424R60A1	18-36	30	287	24	0	250	87	680µF
RS5-2405RD60A1	18-36	30	304	±5	0	±600	82	±2000µF
RS5-2412RD60A1	18-36	30	297	±12	0	±250	84	±900µF
RS5-2415RD60A1	18-36	30	297	±15	0	±200	84	±660µF
RS5-4803R60A1	36-75	15	117	3.3	0	1300	76	6600µF
RS5-4805R60A1	36-75	15	156	5	0	1200	80	3300µF
RS5-4809R60A1	36-75	15	147	9	0	666	85	2000µF
RS5-4812R60A1	36-75	15	149	12	0	500	84	1600µF
RS5-4815R60A1	36-75	15	145	15	0	400	86	1400µF
RS5-4824R60A1	36-75	15	148	24	0	250	84	680µF
RS5-4805RD60A1	36-75	15	152	±5	0	±600	82	±2000µF
RS5-4812RD60A1	36-75	15	147	±12	0	±250	85	±900µF
RS5-4815RD60A1	36-75	15	147	±15	0	±200	85	±660µF

Suffix "H" means 3KVdc isolation

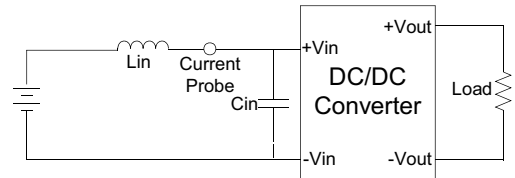
Suffix "C" means with control pin

1. One load is 25% to 100% load, the other load is 100% load, the output voltage variable rate is within  $\pm 5\%$ .
2. Measured with a 0.1uF ceramic capacitor.
3. Test by minimal Vin and constant resistive load.
4. Test by normal Vin and 100%-25% load, 25% load step change.
5. Measured Input reflected ripple current with a simulated source inductance of 12uH and a source capacitor Cin(47uF, ESR<1.0Ω at 100KHz).
6. "Nature Convection" is usually about 30-65 LFM but is not equal to still air (0 LFM).
7. Exceeding the absolute ratings of the unit could cause damage. It's not allowed for continuous operating ratings
8. Input filter components are required to help meet conducted emission class A, which application refer to the EMI Filter of design & feature configuration.
9. An external filter capacitor is required if the module has to meet IEC61000-4-4 and IEC61000-4-5.  
The filter capacitor RSG suggest: Nippon - chemi - con KY series, 330uF/100V.

**TEST CONFIGURATION**

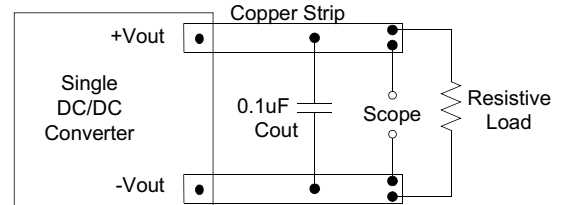
**Input Reflected Ripple Current Test Step**

Input reflected ripple current is measured through a source inductor Lin(12uH) and a source capacitor Cin(47uF, ESR<1.0Ω at 100KHz) at nominal input and full load.



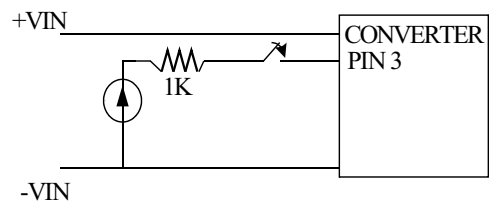
**Output Ripple & Noise Measurement Test**

Use a capacitor Cout(0.1uF) measurement.  
The Scope measurement bandwidth is 0-20MHz.



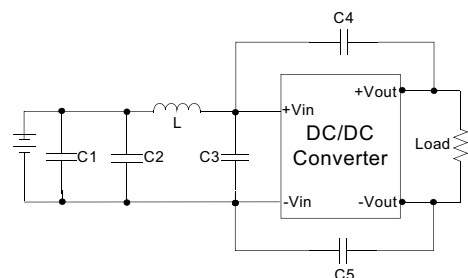
**CTRL Module ON / OFF**

ON: open or high impedance  
OFF: 2-4mA input current (via 1K)



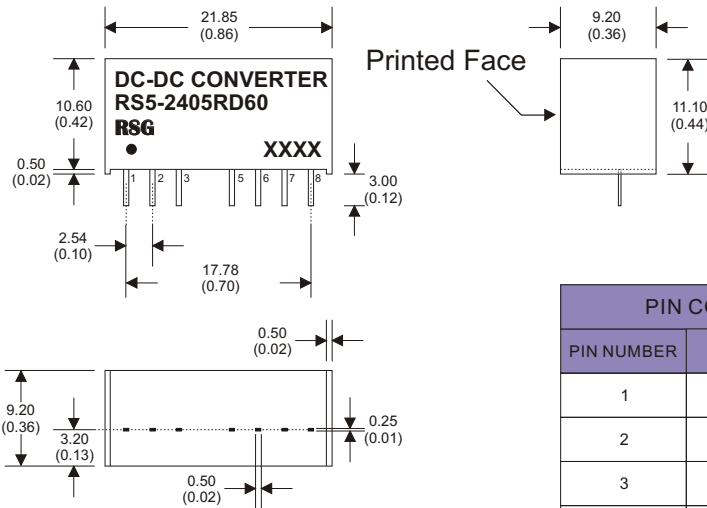
**EMI Filter**

Input filter components (C1,C2,C3,C4,C5, L) are used to help meet conducted emissions requirement for the module. These components should be mounted as close as possible to the module; and all leads should be minimized to decrease radiated noise.



	C1	C2 & C3	L	C4 & C5
RS5-05YY06	Electrolytic capacitor, 220uF/100V	MLCC 22uF/25V	10uH	MLCC 220pF/3KV
RS5-12YY06		MLCC 10uF/50V	10uH	MLCC 220pF/3KV
RS5-24YY06		MLCC 10uF/50V	10uH	MLCC 220pF/3KV
RS5-48YY06		MLCC 2.2uF/100V	15uH	MLCC 220pF/3KV

**MECHANICAL SPECIFICATIONS**



**8 Pin SIL Package**

- Notes : All dimensions are typical in millimeters ( inches ).
1. Pin diameter:  $0.5 \pm 0.05$  (  $0.02 \pm 0.002$  )
  2. Pin pitch and length tolerance:  $\pm 0.35$  (  $\pm 0.014$  )
  3. Pin to case tolerance:  $\pm 0.5$  (  $\pm 0.02$  )
  4. Case Tolerance:  $\pm 0.5$  (  $\pm 0.02$  )
  5. Stand-off tolerance:  $\pm 0.1$  (  $\pm 0.004$  )

PIN CONNECTIONS		
PIN NUMBER	SINGLE	DUAL
1	-V Input	-V Input
2	+V Input	+V Input
3	N.P.	N.C.
5	N.P.	N.C.
6	+V Output	+V Output
7	-V Output	Common
8	N.C.	-V Output

PIN CONNECTIONS		
PIN NUMBER	SINGLE + C	DUAL + C
1	-V Input	-V Input
2	+V Input	+V Input
3	Remote On/Off	Remote On/Off
5	N.C.	N.C.
6	+V Output	+V Output
7	-V Output	Common
8	N.C.	-V Output

The models listed above are standard types. If you need special specifications or have questions regarding packing (Tube or Tape&Reel) or need application support, please contact our specialists: [sales@rsg-electronic.de](mailto:sales@rsg-electronic.de) or +49 69-984047-0