#### 3.0W Regulated Single & Dual Output

**OUTPUT SPECIFICATION** 







- RS5-R30W/RD30W
- 8 Pin SIL Package
- Wide 4:1 Input Range
- 1600VDC Isolation
- Continuous Short Circuit Protection
- Efficiency up to 82%

Voltage accuracy: ±1%

Maximum Output Current: See table

- Operating Temperature Range -40° ~ +85°C
- Non Conductive Black Plastic Case
- Remote on/off Control(Optional)





**ENVIRONMENTAL SPECIFICATION** Operating Temperature range: -40°C ~+85°C (see Derating Curve) Maximum Case Temperature: 100°C

Line regulation± 0.2% max.Storage Temperature:- 4.0°C ~+1.25°CLOAD REGULATIONpaid (rom 10% to 100% load) ±1% maxCooling:Nature ConvectionOross Regulation (Dual Otupi)± 5%PMSICAL SPECIFICATIONS:Cross Regulation (Dual Otupi)100% box 100% load) ±1% maxPIN Material SIP Case:C519R-H Solder-coatedRipple noise (200Mz bandwith)30mV pk.pk max.POtting Material:Silicon (UL94V-0 rated)Temperature coefficient:200% vs.pkABSOLUTE MAXMUM RATINGSTransient Recovery Im:250us, typ.ABSOLUTE MAXMUM RATINGSThransient Recovery Im:250us, typ.Input Surge Voltage (100ms)/IMPUT SPECIFICATIONS12 V Models:50VOC max.Voltage Range:See tableSoldering Temperature:260°C max. <sup>(10</sup> No-Load/full-Load Input Current:See tableSoldering Temperature:Soldering Temperature:No-Load/full-Load Input Current:See tableSoldering Temperature:Soldering Temp	•		•		
Dual from 10% to 100% Load) ±1% maxPHYSICAL SPECIFICATIONS:Cross Regulation (Dual Output):±5%Case Material:Non conductive black plasticShort Circuit Protection :Indefinite (Automatic Recovery)PIN Material:Silicon (UL94/-0 rated)Ripple noise (20Mhz bandwidth):30M pk.pk max.Potting Material:Silicon (UL94/-0 rated)Temperature coefficient:±0.02%<>CWeight Case:CS 19R.H Solder - coatedCapacitor load:See tableDimmension SIP:0.86" x 0.36" x 0.44"Transient Recovery Time:250us, typ.ABSOLUTE MAXIMUM RATINGSTransient Response:(Deviation) ±3% max.Input Surge Voltage (100ms)/INPUT SPECIFICATIONS12 V Models:25VDC max.No-Load/Full-Load input Current:See tableSoldering Temperature:No-Load/Full-Load input Current:See tableEMC SPECIFICATIONSInput Filter:CapacitorsRadiated-/Conducted Emissions:EN55022 Class A (see EMI Filter note)Input Filter:CapacitorsRadiated-/Conducted Emissions:EN55022 Class A (see EMI Filter note)Input Filter:20mA pk-pkESD:EC 61000-4-3 Perf.Criteria AGENERAL SPECIFICATIONSESD:EC 61000-4-4 Perf.Criteria AI/O Isolation Resistance:1000M Ohm, minPFMFEC 61000-4-4 Perf.Criteria AI/O Isolation Resistance:1000M Ohm, minPFMFEC 61000-4-4 Perf.Criteria AI/O Isolation Resistance:1000M Ohm, minPFMFItse conditions may adversely affect Clong etam:I/O Isolation Resistance:	Line regulation:	± 0.2% max.	Storage Temperature :	-40°C ~+125°C	
Cross Regulation (Dual Output):       ± 5%       Case Material:       Non conductive black plastic         Short Circuit Protection:       Indefinite (Automatic Recovery)       PIN Material SIP Case:       C519R-H Solder -coated         Ripple noise (20Mhz bandwidth):       30mV pk-pk max.       Potting Material:       Silicon (UL94V-0 rated)         Temperature coefficient:       10.02%<>*C       Weight Case:       Silicon (UL94V-0 rated)         Capacitor load:       See table       Dimmension SIP:       0.86" x 0.36" x 0.44"         Transient Response:       (Deviation) ±3% max.       Input Surge Voltage (100ms)/         INPUT SPECIFICATIONS       12 V Models:       50VDC max.         Voltage Range:       See table       12V Models:       50VDC max.         No-Load/Full-Load Input Current:       See table       Soldering Temperature:       20"C max.         No-Load/Full-Load Input Current:       See table       ENC SPECIFICATIONS         Input Reflected Ripple Current:       20mA pk-pk       ESD:       IEC 61000-4-2 Perf.Criteria A         GENERAL SPECIFICATIONS       ESC 1000 C4-3 Perf.Criteria A       EFT:       IEC 61000-4-3 Perf.Criteria A         I/O Isolation Resistance:       1000M Ohm, min       PFMF       IEC 61000-4-5 Perf.Criteria A         I/O Isolation Resistance:       1000M Ohm, min       PFMF <td>LOAD REGULATION:</td> <td>Single (from 0% to 100% Load) <math display="inline">\pm 1\%</math> max</td> <td>Cooling :</td> <td>Nature Convection</td>	LOAD REGULATION:	Single (from 0% to 100% Load) $\pm 1\%$ max	Cooling :	Nature Convection	
Short Circuit Protection :Indefinite (Automatic Recovery)PIN Material SIP Case:C S19R-H Solder - coatedRipple noise (20Mhz bandwidth):30mV ple-pk max.Potting Material:Silicon (UL94V-0 rated)Temperature coefficient:4.0.02%<*C		Dual (from 10% to 100% Load) $\pm$ 1% max	PHYSICAL SPECIFICATIONS:		
Ripple noise (20Mhz bandwidth):     30mV pk-pk max.     Potting Material:     Silicon (U194V-0 rated)       Temperature coefficient:     ±0.02%<>°C     Weight Case- Sip:     4.8g, typ.       Capacitor load:     See table     Dimmension SIP:     0.86" x 0.36" x 0.44"       Transient Recovery Time:     250us, typ.     ABSOLUTE MAXIMUM RATINGS       Transient Response:     (Deviation) ±3% max.     Input Surge Voltage (100ms)/       INPUT SPECIFICATIONS     12 V Models:     25VDC max.       Voltage Range:     See table     12V Models:     50VDC max.       Start up Time:     30ms, typ.     48V Models:     100VDC max.       Max. Input Current:     See table     Soldering Temperature:     260°C max.       No-Load/full-Load Input Filter:     Capacitors     Radiated-/Conducted Emissions:     EN55022 Class A (see EMI Filter note)       Input Reflected Ripple Current:     20mA pk-pk     ESD:     IEC 61000-4-3 Perf.Criteria A       I/O Isolation Voltage (60sec):     1600VDC     SURGE:     IEC 61000-4-4 Perf.Criteria A       I/O Isolation Capacitance:     200P Fmax.     CS:     IEC 61000-4-4 Perf.Criteria A       I/O Isolation Capacitance:     100M Ohm, min     PFMF     EC 61000-4-4 Perf.Criteria A       I/O Isolation Resistance:     1000M Ohm, min     PFMF     25.1.7MHrs       Safety Standard:     (desi	Cross Regulation (Dual Output):	± 5%	Case Material:	Non conductive black plastic	
Temperature coefficient:±0.02%<°CWeight Case-Sip:4.8g, typ.Capacitor load:See tableDimmension SIP:0.86" x 0.36" x 0.44"Transient Recovery Time:250us, typ.ABSOLUTE MAXIMUM RATINGSTransient Response:(Deviation) ±3% max.Input Surge Voltage (100ms)/INPUT SPECIFICATIONS12 V Models:25VDC max.Voltage Range:See table12V Models:50VDC max.No-Load/Full-Load Input Current:See tableSoldering Temperature:260°C max. <sup>[a]</sup> No-Load/Full-Load Input Filter:CapacitorsRadiated-/Conducted Emissions:ENS5022 Class A (see EMI Filter note)Input Reflected Ripple Current:20mA pk-pkESD:IEC 61000-4-2 Perf.Criteria AGENERAL SPECIFICATIONSESD:IEC 61000-4-3 Perf.Criteria AI/O Isolation Voltage (60sec):1600VDCSURGE:IEC 61000-4-5 Perf.Criteria AI/O Isolation Capacitance:200P max.C:IEC 61000-4-5 Perf.Criteria AI/O Isolation Resistance:1000M Ohm, minPFMFIEC 61000-4-8 Perf.Criteria AI/O Isolation Resistance:1000M Ohm, minPFMFIEC 61000-4-8 Perf.Criteria ASafety Standard:(designed to meet): IEC 60950-11adversely affect long-term reliability.Remote on Controll:on: 0 open or high impedance Remote off Controll:0f: 2-4mA Input current (Via 1K)1Safety Standard:on: 0 open or high impedance Remote off Controll:off: 2-4mA Input current (Via 1K)1	Short Circuit Protection :	Indefinite (Automatic Recovery)	PIN Material SIP Case:	C519R-H Solder -coated	
Capacitor load:See tableDimmension SIP:0.86" x 0.36" x 0.44"Transient Recovery Time:250us, typ.ABSOLUTE MAXIMUM RATINGSTransient Response:(Deviation) ±3% max.Input Surge Voltage (100ms)/INPUT SPECIFICATIONS12 V Models:25VDC max.Voltage Range:See table12V Models:50VDC max.Start up Time:30ms, typ.48V Models:100VDC max.Max. Input Current:See tableSoldering Temperature:260°C max.Max. Input Filter:CapacitorsRadiated-/Conducted Emissions:ENS5022 Class A (see EMI Filter note)Input Reflected Ripple Current:20mA pk-pkESD:IEC 61000-4-2 Perf.Criteria AGENERAL SPECIFICATIONSEfficiency:See tableEFF:IEC 61000-4-2 Perf.Criteria AI/O Isolation Voltage (60sce):1600VDCSURGE:IEC 61000-4-4 Perf.Criteria AI/O Isolation Capacitance:200pF max.SURGE:IEC 61000-4-8 Perf.Criteria AI/O Isolation Resistance:2000F max.SURGE:IEC 61000-4-8 Perf.Criteria AI/O Isolation Resistance:2000M Ohm, minPFMFIEC 61000-4-8 Perf.Criteria AI/O Isolation Resistance:2000M Ohm, minPFMFIC 61000-4-8 Perf.Criteria AI/O Isolation Capacitance:200F 11 These are stress ratings. Exposure of devices to any of these conditions may adversely affect long term reliability.Reliability Calculated MTBF:> 1.7MHrs1 There are Stress ratings. Exposure of devices to any of these and full load unless otherwise specification contained in this data sheet are beli	Ripple noise (20Mhz bandwidth):	30mV pk-pk max.	Potting Material:	Silicon (UL94V-0 rated)	
Transient Recovery Time:250us, typ.ABSOLUTE MAXIMUM RATINGSInput SpecificAtIONS:Input Surge Voltage (100ms)/INPUT SPECIFICATIONS:12 V Models:Voltage Range:See tableVoltage Range:See tableStart up Time:30ms, typ.Max. Input Current:See tableNo-Load/Full-Load Input Current:See tableInput Filter:CapacitorsRadiated-/Conducted Emissions:EMS5022 Class A (see EMI Filter note)Input Reflected Ripple Current:20m A pk-pkGENERAL SPECIFICATIONSRadiated-/Conducted Emissions:If Collation Voltage (60sec):1600 VDC1/O Isolation Voltage (60sec):1600 VDCV/O Isolation Resistance:200p Fmax.V/O Isolation Resistance:1000 M Ohm, minV/O Isolation Resistance:1000 M Ohm, minV/O Isolation Resistance:200k1r, typ.1) These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term reliability.2) (ILI-IMDBK-2177)3) All specifications typical at TA = 25'r, nominal input voltage and full load unless otherwise specification contained in this data sheet are believed to be correct at time of publication. However RSG accepts no responsibility for consequences arising from printing errors or inaccuracies. Specifications typical at TA = 25'r, nominal input voltage. responsibility for consequences arising from printing errors or inaccuracies. Specifications typical at TA = 25'r, nominal input voltage. Specifications typical at TA = 25'r, nominal input voltage. responsibility for consequences arising from printing errors or inaccuracies. Specificati	Temperature coefficient:	±0.02%<>°C	Weight Case- Sip:	4.8g, typ.	
Transient Response:       (Deviation) ±3% max.       Input Surge Voltage [100ms)/         INPUT SPECIFICATIONS       12 V Models:       25VDC max.         Voltage Range:       See table       12V Models:       50VDC max.         Start up Time:       30ms, typ.       48V Models:       100VDC max.         Max. Input Current:       See table       Soldering Temperature:       260°C max. <sup>(P)</sup> No-Load/Full-Load Input Filter:       Capacitors       Radiated-/Conducted Emissions:       ENS5022 Class A (see EMI Filter note)         Input Reflected Ripple Current:       20mA pk-pk       EMC SPECIFICATIONS       ESD:       IEC 61000-4-2 Perf.Criteria A         GENERAL SPECIFICATIONS       Res:       IEC 61000-4-3 Perf.Criteria A         I/O Isolation Voltage (60sec):       1600VDC       SURGE:       IEC 61000-4-5 Perf.Criteria A         I/O Isolation Resistance:       1000M Ohm, min       PFMF       IEC 61000-4-8 Perf.Criteria A         I/O Isolation Resistance:       1000M Ohm, min       PFMF       IEC 61000-4-8 Perf.Criteria A         Switching Frequency:       250kHz, typ.       1) These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term-wise specified.         Safety Standard:       (designed to meet): IEC 60950-1       Is information and specification tontained in this data sheet are believed to be correct at time o	Capacitor load:	See table	Dimmension SIP:	0.86" x 0.36" x 0.44"	
INPUT SPECIFICATIONS12 V Models:25VDC max.Voltage Range:See table12 V Models:50VDC max.Start up Time:30ms, typ.48V Models:100VDC max.Max. Input Current:See tableSoldering Temperature:260°C max. <sup>(2)</sup> No-Load/Full-Load Input Filter:CapacitorsRadiated-/Conducted Emissions:ENS5022 Class A (see EMI Filter note)Input Reflected Ripple Current:20mA pk-pkESD:IEC 61000-4-2 Perf.Criteria AGENERAL SPECIFICATIONSRS:IEC 61000-4-3 Perf.Criteria A(/O Isolation Voltage (60sec):1600VDCSURGE:IEC 61000-4-5 Perf.Criteria AI/O Isolation Capacitance:200pF max.CS:IEC 61000-4-6 Perf.Criteria AI/O Isolation Resistance:1000M Ohm, minPFMFIEC 61000-4-8 Perf.Criteria AI/O Isolation R	Transient Recovery Time:	250us, typ.	ABSOLUTE MAXIMUM RATING	GS	
Voltage Range:See table12V Models:50VDC max.Start up Time:30ms, typ.48V Models:100VDC max.Max. Input Current:See tableSoldering Temperature:260°C max.No-Load/Full-Load Input Current:See tableEMC SPECIFICATIONSInput Filter:CapacitorsRadiated-/Conducted Emissions:EN55022 Class A (see EMI Filter note)Input Reflected Ripple Current:20mA pk-pkESD:IEC 61000-4-2 Perf.Criteria AGENERAL SPECIFICATIONSSee tableEFT:IEC 61000-4-3 Perf.Criteria AI/O Isolation Voltage (60sec):1600VDCSURGE:IEC 61000-4-4 Perf.Criteria AI/O Isolation Capacitance:200pF max.CS:IEC 61000-4-5 Perf.Criteria AI/O Isolation Resistance:1000M Ohm, minPFMFIEC 61000-4-8 Perf.Criteria ASwitching Frequency:250kHz, typ.1These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term reliability.Safety Standard:95% rel H3) All specification contained in this data sheet are believed to be correct at time of publication. However RSG accepts no responsibility for consequences arising from printing errors or inaccuracies. Specifications are subject to change without notice.Safety Standard:off: 2-4mA Input current (Via 1K)	Transient Response:	( Deviation) ±3% max.	Input Surge Voltage (100ms)/		
Start up Time:30ms, typ.48V Models:100VDC max.Max. Input Current:See tableSoldering Temperature:260°C max.260°C max.200°C max.	INPUT SPECIFICATIONS		12 V Models:	25VDC max.	
Max. Input Current:See tableSoldering Temperature:260°C max.200°C max.	Voltage Range:	See table	12V Models:	50VDC max.	
No-Load/Full-Load Input Current:See tableEMC SPECIFICATIONSInput Reflected Ripple Current:20mA pk-pkRadiated-/Conducted Emissions:EN55022 Class A (see EMI Filter note)GENERAL SPECIFICATIONSESD:IEC 61000-4-2 Perf.Criteria AGENERAL SPECIFICATIONSSee tableEFT:IEC 61000-4-3 Perf.Criteria AV/O Isolation Voltage (60sec):1600VDCSURGE:IEC 61000-4-5 Perf.Criteria AI/O Isolation Capacitance:200pF max.CS:IEC 61000-4-6 Perf.Criteria AI/O Isolation Resistance:1000M Ohm, minPFMFIEC 61000-4-8 Perf.Criteria AI/O Isolation Resistance:250KHz, typ.1) These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term reliability.1) These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term reliability.Reliability Calculated MTBF:> 1.7MHrs3) All specifications typical at TA= 25°C, nominal input voltage and full load unless otherwise specified.Safety Standard:(designed to meet): IEC 60950-1n: o open or high impedance responsibility for consequences arising from printing errors or inaccuracies. Specifications are subject to change without notice.Remote of Controll:Off: 2-4mA Input current (Via 1K)	Start up Time:	30ms, typ.	48V Models:	100VDC max.	
Input Filter:CapacitorsRadiated-/Conducted Emissions:EN55022 Class A (see EMI Filter note)Input Reflected Ripple Current:20mA pk-pkESD:IEC 61000-4-2 Perf.Criteria AGENERAL SPECIFICATIONSRS:IEC 61000-4-3 Perf.Criteria AEfficiency:See tableEFT:IEC 61000-4-4 Perf.Criteria AI/O Isolation Voltage (60sec):1600VDCSURGE:IEC 61000-4-5 Perf.Criteria AI/O Isolation Capacitance:200pF max.CS:IEC 61000-4-6 Perf.Criteria AI/O Isolation Resistance:1000M Ohm, minPFMFIEC 61000-4-8 Perf.Criteria ASwitching Frequency:250kHz, typ.1) These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term reliability. 2) (LSmm from case 10sec Max.)1) These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term reliability. 2) (LSmm from case 10sec Max.)Safety Standard:Nepenor on righ impedance Remote of Controll:N: 0 open or high impedance Off: 2-4mA Input current (Via 1K)	Max. Input Current:	See table	Soldering Temperature:	260°C max. <sup>(2)</sup>	
Input Reflected Ripple Current : 20mA pk-pkESD: IEC 61000-4-2 Perf.Criteria AGENERAL SPECIFICATIONSRS: IEC 61000-4-3 Perf.Criteria AEfficiency: See tableEFT: IEC 61000-4-4 Perf.Criteria AI/O Isolation Voltage (60sec): 1600VDCSURGE: IEC 61000-4-5 Perf.Criteria AI/O Isolation Capacitance: 200pF max.CS: IEC 61000-4-6 Perf.Criteria AI/O Isolation Resistance: 1000M Ohm, minPFMFSwitching Frequency: 250kHz, typ.1 These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term reliability.Reliability Calculated MTBF : > 1.7MHrs1.7MHrsSafety Standard: (designed to meet): IEC 60950-1Al specifications typical at TA= 25°C, nominal input voltage and full load unless otherwise specified.Remote on Controll: on: 0 open or high impedanceOr open or high impedanceRemote off Controll: Off: 2-4mA Input current (Via 1K)Offic 2-4mA Input current (Via 1K)	No-Load/Full-Load Input Current:	See table	EMC SPECIFICATIONS		
GENERAL SPECIFICATIONSRS: IEC 61000-4-3 Perf.Criteria AEfficiency: See tableEFT: IEC 61000-4-4 Perf.Criteria AI/O Isolation Voltage (60sec): 1600VDCSURGE: IEC 61000-4-5 Perf.Criteria AI/O Isolation Capacitance: 200pF max.CS: IEC 61000-4-6 Perf.Criteria AI/O Isolation Resistance: 1000M Ohm, minPFMF IEC 61000-4-8 Perf.Criteria ASwitching Frequency: 250kHz, typ.1) These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term reliability.Mumidity: 95% rel H2) (1.5mm from case 10sec Max.)Safety Standard: (designed to meet): IEC 60950-13) All specifications typical at TA= 25°C, nominal input voltage and full load unless otherwise specified.Safety Standard: (designed to meet): IEC 60950-1Or open or high impedance Remote on Controll: on: 0 open or high impedance Remote off Controll: Off: 2-4mA Input current (Via 1K)Set and and the open content in this data sheet are believed to be correct at time of publication. However RSG accepts no responsibility for consequences arising from printing errors or inaccuracies. Specifications are subject to change without notice.	Input Filter:	Capacitors	Radiated-/Conducted Emissions:	EN55022 Class A (see EMI Filter note)	
Efficiency:See tableEFT:IEC 61000-4-4 Perf.Criteria AI/O Isolation Voltage (60sec):1600VDCSURGE:IEC 61000-4-5 Perf.Criteria AI/O Isolation Capacitance:200pF max.CS:IEC 61000-4-6 Perf.Criteria AI/O Isolation Resistance:1000M Ohm, minPFMFIEC 61000-4-8 Perf.Criteria ASwitching Frequency:250kHz, typ.1These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term reliability.Neliability Calculated MTBF:>1.7MHrs1These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term reliability.Safety Standard: (designed to meet): IEC 60950-11.1 These are stress pecification contained in this data sheet are believed to be correct at time of publication. However RSG accepts no responsibility for consequences arising from printing errors or inaccuracies. Specifications are subject to change without notice.Remote off Controll:Off: 2-4mA Input current (Via 1K)	Input Reflected Ripple Current :	20mA pk-pk	ESD:	IEC 61000-4-2 Perf.Criteria A	
I/O Isolation Voltage (60sec):1600VDCSURGE:IEC 61000-4-5 Perf.Criteria AI/O Isolation Capacitance:200pF max.CS:IEC 61000-4-6 Perf.Criteria AI/O Isolation Resistance:1000M Ohm, minPFMFIEC 61000-4-8 Perf.Criteria ASwitching Frequency:250kHz, typ.11Humidity:95% rel H11These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term reliability.Reliability Calculated MTBF:> 1.7MHrs3All specifications typical at TA= 25°C, nominal input voltage and full load unless otherwise specified.Safety Standard:(designed to meet): IEC 60950-1+ 1000000000000000000000000000000000000	GENERAL SPECIFICATIONS		RS:	IEC 61000-4-3 Perf.Criteria A	
I/O Isolation Capacitance:       200pF max.       CS: IEC 61000-4-6 Perf.Criteria A         I/O Isolation Resistance:       1000M Ohm, min       PFMF IEC 61000-4-8 Perf.Criteria A         Switching Frequency:       250kHz, typ.       1) These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term reliability.         Reliability Calculated MTBF :       > 1.7MHrs       3) All specifications typical at TA= 25°C, nominal input voltage and full load unless otherwise specified.         Safety Standard: (designed to meet): IEC 60950-1       3) All specification and specification contained in this data sheet are believed to be correct at time of publication. However RSG accepts no responsibility for consequences arising from printing errors or inaccuracies. Specifications are subject to change without notice.         Remote off Controll:       Off: 2-4mA Input current (Via 1K)	Efficiency:	See table	EFT:	IEC 61000-4-4 Perf.Criteria A	
I/O Isolation Resistance:       1000M Ohm, min       PFMF       IEC 61000-4-8 Perf.Criteria A         Switching Frequency:       250kHz, typ.       1) These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term reliability.         Reliability Calculated MTBF :       > 1.7MHrs       2) (1.5mm from case 10sec Max.)         Safety Standard: (designed to meet): IEC 60950-1       3) All specifications typical at TA= 25°C, nominal input voltage and full load unless otherwise specified.         Remote on Controll:       on: 0 open or high impedance       responsibility for consequences arising from printing errors or inaccuracies.         Specifications are subject to change without notice.       Specifications are subject to change without notice.	I/O Isolation Voltage (60sec):	1600VDC	SURGE:	IEC 61000-4-5 Perf.Criteria A	
Switching Frequency:       250kHz, typ.         Humidity:       95% rel H         Seliability Calculated MTBF:       > 1.7MHrs         (MIL-HDBK-217 f)       > 1.7MHrs         Safety Standard: (designed to meet): IEC 60950-1       3 All specification and specification contained in this data sheet are believed to be correct at time of publication. However RSG accepts no responsibility for consequences arising from printing errors or inaccuracies. Specifications are subject to change without notice.	I/O Isolation Capacitance:	200pF max.	CS:	IEC 61000-4-6 Perf.Criteria A	
Humidity:       95% rel H         Reliability Calculated MTBF :       > 1.7MHrs         (MIL-HDBK-217 f)       3) All specifications typical at TA= 25°C, nominal input voltage and full load unless otherwise specified.         Safety Standard: (designed to meet): IEC 60950-1       4) The information and specification. However RSG accepts no responsibility for consequences arising from printing errors or inaccuracies.         Remote off Controll:       Off: 2-4mA Input current (Via 1K)	I/O Isolation Resistance:	1000M Ohm, min	PFMF	IEC 61000-4-8 Perf.Criteria A	
Reliability Calculated MTBF: > 1.7MHrs       2) (1.5mm from case 10sec Max.)         Neliability Calculated MTBF: > 1.7MHrs       3) All specifications typical at TA= 25°C, nominal input voltage and full load unless otherwise specified.         MIL-HDBK-217 f)       4) The information and specification contained in this data sheet are believed to be correct at time of publication. However RSG accepts no responsibility for consequences arising from printing errors or inaccuracies. Specifications are subject to change without notice.         Remote off Controll: Off: 2-4mA Input current (Via 1K)       2) (1.5mm from case 10sec Max.)	Switching Frequency:	250kHz, typ.	1) These are stress ratings. Exposure of dev	ices to any of these conditions may	
Reliability Calculated MTBF: > 1.7MHrs       3) All specifications typical at TA= 25°C, nominal input voltage and full load unless otherwise specified.         (MIL-HDBK-217 f)       4) The information and specification contained in this data sheet are believed to be correct at time of publication. However RSG accepts no responsibility for consequences arising from printing errors or inaccuracies.         Remote off Controll:       Off: 2-4mA Input current (Via 1K)	Humidity:	95% rel H	, , ,		
4) The information and specification contained in this data sheet are believed to be correct at time of publication. However RSG accepts no responsibility for consequences arising from printing errors or inaccuracies. Specifications are subject to change without notice.		> 1.7MHrs	<ol> <li>All specifications typical at TA= 25°C, nominal input voltage and full load unless otherwise specified.</li> </ol>		
Safety Standard: (designed to meet): IEC 60950-1       to be correct at time of publication. However RSG accepts no responsibility for consequences arising from printing errors or inaccuracies. Specifications are subject to change without notice.         Remote off Controll:       Off: 2-4mA Input current (Via 1K)	(MIL-HDBK-217 †)				
Remote on Controll:       On: U open or high impedance       Specifications are subject to change without notice.         Remote off Controll:       Off: 2-4mA Input current (Via 1K)	Safety Standard: (designed to meet): IEC 60950-1		to be correct at time of publication. However RSG accepts no		
Remote off Controll: Off: 2-4mA Input current (Via 1K)	Remote on Controll:	on: 0 open or high impedance			
Off stand by current (Nominal Vin): 2.5mA max.	Remote off Controll:	Off: 2-4mA Input current (Via 1K)			
	Off stand by current (Nominal Vin):	2.5mA max.			

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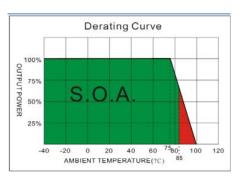


X W



**RS5-R30W/RD30W** 

#### NUMBER STRUCTURE XX XX XX RS5 -XX Α T Output Name/Package Power (W) Code RS5=SIL8 03=3.3V 20=3.00 internal 05=5.0V 30=3.00 Input Isolation 12=12V **Type** R = Single regulated 12=4.5-18V 24=9.0-36V (kVDC) 15=15V 1 = 1.648=18-75V RD= Dual regulated W = 4:1 input Range



# MODEL SELECTION GUIDE

	INPUT	INPUT	Current	OUTPUT	OUTPL	IT Current		
MODEL NUMBER	Voltage Range	No-Load	Full Load	Voltage	Min. load	Full load		Capacito
		(mA)	(mA)	(Vdc)	(mA)	(mA)	@FL(%)	r 1700 F
RS5-1203R30A1W	4.5-18	40	268	3.3	0	700	72	1760uF
RS5-1205R30A1W	4.5-18	40	325	5	0	600	77	1000uF
RS5-1212R30A1W	4.5-18	40	309	12	0	250	81	170uF
RS5-1215R30A1W	4.5-18	40	309	15	0	200	81	110uF
RS5-1205RD30A1W	4.5-18	40	325	±5	0	±300	77	±470uF
RS5-1212RD30A1W	4.5-18	40	313	±12	0	±125	80	±100uF
RS5-1215RD30A1W	4.5-18	40	313	±15	0	±100	80	±47uF
RS5-2403R30A1W	9-36	25	129	3.3	0	700	75	1760uF
RS5-2405R30A1W	9-36	25	159	5	0	600	79	1000uF
RS5-2412R30A1W	9-36	30	153	12	0	250	82	170uF
RS5-2415R30A1W	9-36	30	153	15	0	200	82	110uF
RS5-2405RD30A1W	9-36	30	159	±5	0	±300	79	±470uF
RS5-2412RD30A1W	9-36	35	159	±12	0	±125	79	±100uF
RS5-2415RD30A1W	9-36	35	157	±15	0	±100	80	±47uF
RS5-4803R30A1W	18-75	15	66	3.3	0	700	74	1760uF
RS5-4805R30A1W	18-75	15	81	5	0	600	78	1000uF
RS5-4812R30A1W	18-75	15	79	12	0	250	80	170uF
RS5-4815R30A1W	18-75	15	78	15	0	200	81	110uF
RS5-4805RD30A1W	18-75	15	80	±5	0	±300	79	±470uF
RS5-4812RD30A1W	18-75	15	80	±12	0	±125	79	±100uF
RS5-4815RD30A1W	18-75	15	80	±15	0	±100	79	±47uF

1. One load is 25% to 100% load, the other load is 100% load, the output voltage variable rate is within ±5%.

2. Measured with a 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. Exceeding the absolute ratings of the unit could cause damage. It's not allowed for continuous operating ratings.

7. Input filter components are be required to help meet conducted emission class A, which

application refer to the EMI Filter of design & feature configuration.

8. 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, 220uF/100V.

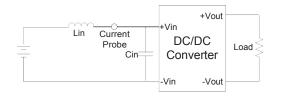
**RS5-R30W/RD30W** 





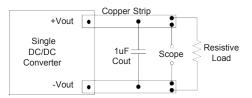
### Input Reflected Ripple Current Test Step

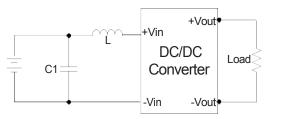
Input reflected ripple current is measured through a source inductor Lin(12uH) and a source capacitor Cin(47uF, ESR<1.0© at 100KHz) at nominal input and full load.



#### **Output Ripple & Noise Measurement Test**

Use a capacitor Cout(1.0uF) measurement. The Scope measurement bandwidth is 0-20MHz.

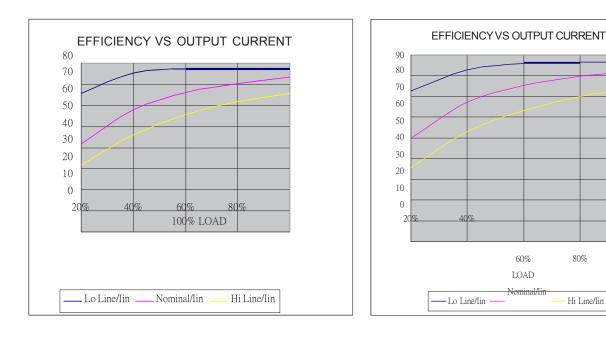




	C1	L
RS5-12XXR/RD30A1W	1210 10uF/35V	2.5uH
RS5-24XXR/RD30A1W	1210 2.2uF/100V	10uH
RS5-48XXR/RD30A1W	1210 2.2uF/100V	18uH

#### **EMI** Filter

Input filter components (C1, 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.



RS5-1203R30A1W

RS5-4815R30A1W

80%

Hi Line/Iin

100%

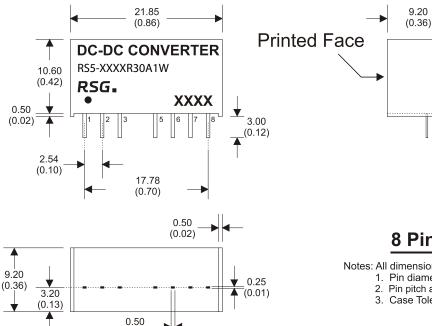


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#### MECHANICAL SPECIFICATIONS





(0.02)

## 8 Pin SIL Package

11.10

(0.44)

¥

Notes: All dimensions are typical in millimeters ( inches ). 1. Pin diameter: 0.5 ±0.05 ( 0.02 ±0.002 ) 2. Pin pitch and length tolerance: ±0.35 ( ±0.014 )

3. Case Tolerance: ±0.5 ( ±0.02 )

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

The models listed here are just standard type. If you need a product with special specification or you have questions regarding packing standards (Tube oder Tape/Reel) as well as application support, please contact our specialists: sales@rsg-electronic.de or +49 69-984047-41/-28