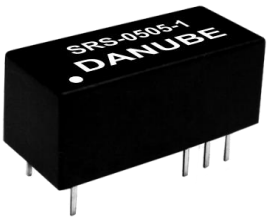
SR SERIES

0.5W TO 1W REGULATED

DANUBE

FEATURES

- DUAL IN LINE PACKAGE
- UP TO 1W REGULATED OUTPUT POWER
- 100% BURN IN
- EFFICIENCYUP TO 63%
- INTERNAL SMD TECHNOLOGY
- LOW COST
- NO HEATSINK REQUIRED
- UL 94V-0 PACKAGE MATERIAL
- CUSTOM SOLUTIONS AVAILABLE
- RoHS COMPLIANT
- 3 YEARS WARRANTY



OUTPUT SPECIFICATIONS	
Voltage Set-point Accuracy	+/-3% max.
Temperature Coefficient	+/-0.05%/°C
Ripple & Noise(20MHz BW)[1]	100mVp-p max.
Line Regulation[2]	+/-1% max.
Load Regulation[3]	+/-1% max.
Minimum Load	10% of Full Load
Short Circuit Protection	Current Limit Protection
Short Circuit Restart	Automatic
Transient Response[5]	200uS max.
Maximum Capacitive Load	220uf
Startup time(Nominal input)	10ms

ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature	-25 °C to +71 °C
Case Temperature	+90°C max.
Storage Temperature	-55 °C to +125 °C
Humidity	95% max.
Cooling	Free-Air Convection

INPUT SPECIFICATIONS	
Input Voltage Range	+/-10% max.
Input Filter	Capacitor Type
Protection	Fuse Recommended

GENERAL SPECIFICATIONS	
Efficiency	50% min.
Isolation Voltage[4]	1500VDC min.
Isolation Resistance	10^9 ohms min.
Isolation Capacitance	80pF max.
Switching Frequency	50KHz min.
MTBF[6]	>2,000,000 Hours
Weight	3.1g typ.
Case Material	Non-Conductive Plastic
Case Size	22.6mm*9.9mm*8.9mm
Radiated Emissions	EN55032 Class B

ALL SPECIFICATIONS TYPICAL AT NOMINAL LINE, FULL LOAD , AND 25 °C UNLESS OTHERWISE NOTED.

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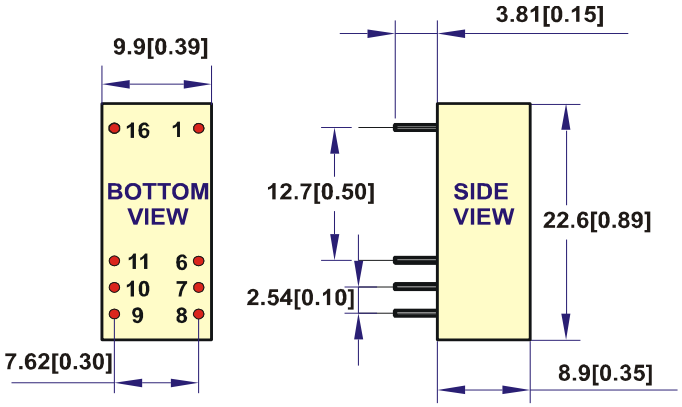
[1] *Measured with 1uF ceramic capacitor connect to the output pins.*
[2] *High Line to Low Line.*
[3] *Load Regulation is for output load current change from 10% to 100%.*
[4] *For 10 seconds.*
[5] *25% Step Load Change.*
[6] *MIL-HDBK-217F @25 °C , Ground Benign.*

● SELECTION GUIDE
0.5W-1W OUTPUT

MODEL NUMBER	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (mA)	INPUT CURRENT(mA)		EFF (%)	ISOLATION (VDC)	OUTPUT POWER (Watt)
				FULL LOAD	NO LOAD			
SRS-0505-1	4.5-5.5	5	100	167	35	60	1500	0.5W
SRS-0509-1	4.5-5.5	9	56	183	35	55	1500	0.5W
SRS-0512-1	4.5-5.5	12	42	173	36	58	1500	0.5W
SRS-0515-1	4.5-5.5	15	34	173	37	58	1500	0.5W
SRS-1205-1	10.8-13.2	5	100	68	15	61	1500	0.5W
SRS-1209-1	10.8-13.2	9	56	76	13	55	1500	0.5W
SRS-1212-1	10.8-13.2	12	42	70	12	60	1500	0.5W
SRS-1215-1	10.8-13.2	15	34	72	13	58	1500	0.5W
SRS-2405-1	21.6-26.4	5	100	34	8	61	1500	0.5W
SRS-2409-1	21.6-26.4	9	56	38	9	55	1500	0.5W
SRS-2412-1	21.6-26.4	12	42	36	9	58	1500	0.5W
SRS-2415-1	21.6-26.4	15	34	36	9	58	1500	0.5W
SRS-4805-1	43.2-52.8	5	100	18	4	58	1500	0.5W
SRS-4809-1	43.2-52.8	9	56	19	5	55	1500	0.5W
SRS-4812-1	43.2-52.8	12	42	19	5	55	1500	0.5W
SRS-4815-1	43.2-52.8	15	34	19	5	55	1500	0.5W
SRS-0505-2	4.5-5.5	5	200	330	40	61	1500	1W
SRS-0509-2	4.5-5.5	9	100	340	40	59	1500	1W
SRS-0512-2	4.5-5.5	12	84	345	45	58	1500	1W
SRS-0515-2	4.5-5.5	15	67	345	45	58	1500	1W
SRS-1205-2	10.8-13.2	5	200	135	15	62	1500	1W
SRS-1209-2	10.8-13.2	9	100	136	16	61	1500	1W
SRS-1212-2	10.8-13.2	12	84	140	16	60	1500	1W
SRS-1215-2	10.8-13.2	15	67	140	16	60	1500	1W
SRS-2405-2	21.6-26.4	5	200	66	7	63	1500	1W
SRS-2409-2	21.6-26.4	9	100	61	10	61	1500	1W
SRS-2412-2	21.6-26.4	12	84	69	10	60	1500	1W
SRS-2415-2	21.6-26.4	15	67	69	10	60	1500	1W
SRS-4805-2	43.2-52.8	5	200	34	6	61	1500	1W
SRS-4809-2	43.2-52.8	9	100	36	7	58	1500	1W
SRS-4812-2	43.2-52.8	12	84	35	7	60	1500	1W
SRS-4815-2	43.2-52.8	15	67	35	8	60	1500	1W

Note: Other input to output voltages may be available. Please contact factory.

MECHANICAL DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS

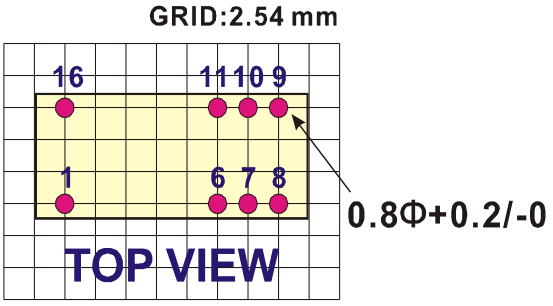


All dimensions are in mm[inches]

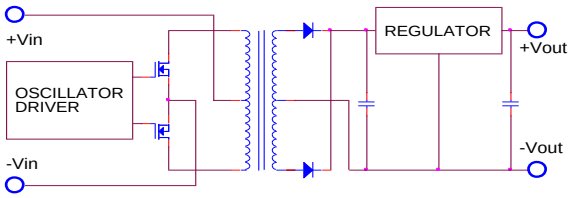
PIN	SINGLE
1 & 16	+Vin
6 & 11	-Vout
7 & 10	+Vout
8 & 9	-Vin

NOTE : All dimensions are in mm(Inches)

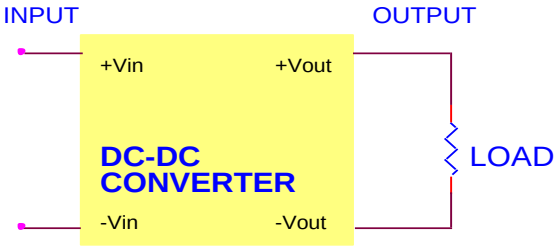
1. Pin Size is 0.50x0.30mm[0.02x0.01"]
2. Pin is Tolerance .XX= ±0.05mm
3. Tolerance .X or .XX= ±0.5mm



SIMPLIFIED SCHEMATIC



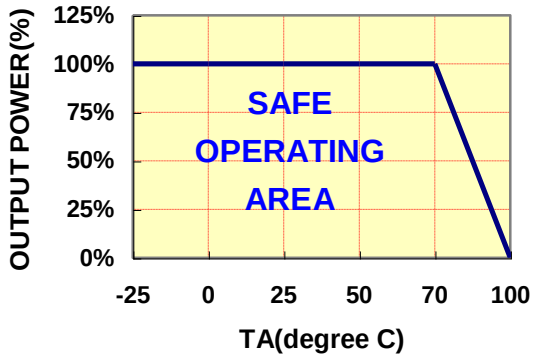
TYPICAL APPLICATIONS



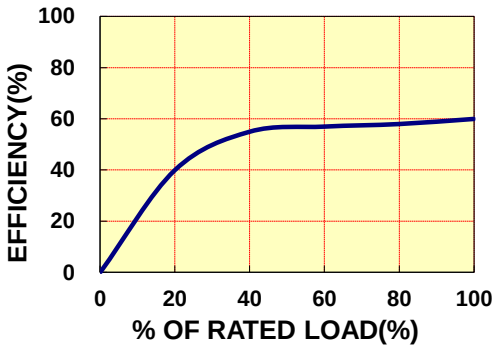
● TYPICAL PERFORMANCE CURVES

Specifications typical at TA=25 °C,nominal input voltage , rated output current unless otherwise specified.

DERATING CURVES

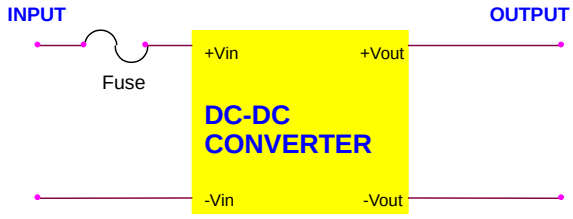


EFFICIENCY VS LOAD



● INPUT FUSE SELECTION GUIDE

4.5-5.5V INPUT VOLTAGE(VDC)	10.8-13.2V INPUT VOLTAGE(VDC)	21.6-26.4V INPUT VOLTAGE(VDC)	43.2-52.8V INPUT VOLTAGE(VDC)
500mA Slow-Blow Type	200mA Slow-Blow Type	100mA Slow-Blow Type	60mA Slow-Blow Type



Note: Certain applications may require the installation of external fuse in front of the input.

SR SERIES APPLICATION NOTES:

EXTERNAL CAPACITANCE REQUIREMENTS:

No external capacitance is required for operation of the SR series.

To meet the reflected ripple requirements of the converter, an input impedance of less than 0.5 ohm from DC to 250KHz is required.

External output capacitance is not required for operation, however it is recommended that 10uF tantalum and 0.1uF ceramic capacitance be selected for reduced system noise.

Additional output capacitance may be added for increased filtering, but should not exceed 470uF.

We Can Offer EMC-Filter According To EN55032 Class B.

Negative Outputs:

A negative output voltage may be obtained by connecting the +OUT to circuit ground and connecting –OUT as the negative output.

FOR MORE INFORMATION CALL:

Danube Enterprise Co., Ltd.

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