

## Features

- Standard SMDpackage
- High power density
- Short-circuit protection
- High reliability
- Low ripple noise

## RS PRO DC - DC Converter

RS Stock No.: 0633263 0633264 0633265  
0633266



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

## Product Description

- Fixed voltage input, isolated nonregulated dual output
- Working temperature range -40 °C to +105 °C
- Small SMD package, international standard pin method
- Isolation voltage 1500Vdc
- Typical efficiency up to 86%

## Electrical Specifications

RS Stock#	Input Voltage (Vdc)	Output Voltage (Vdc)	Output Current (mA)	Efficiency (Typ)	Maximum capacity load
0633263	5 (4.5-5.5)	5	200	85%	1000uF
0633264	12 (10.8-13.2)	5	200	84%	2200uF
0633265	12 (10.8-13.2)	12	83	85%	1000uF
0633266	12 (10.8-13.2)	15	67	85%	1000uF

## General Specifications

Output Voltage	DC 3.3V;5V;9V;12V;15V;24V
Input Voltage Range	DC 3.3(2.97-3.63); 5(4.5-5.5); 12(10.8-13.2); 15(13.5-16.5); 24(21.6-26.4)
Power Rating	1 W
Input Voltage Nominal	DC 3.3V;5V;12V;15V;24V
Output Current	See Electrical Specifications
Mounting Type	SIP
Isolated	Yes
Number of Outputs	1
Output Voltage Adjustment Range	nonsupport
Package	Plastic pipe installation
Isolation Voltage	1500Vdc 1Min
Width	12.8mm
Depth	6.3mm
Length	11.1mm
Railway Approved	No
Load Regulation	15% Max
Medical Approved	No
Efficiency	81%-88%

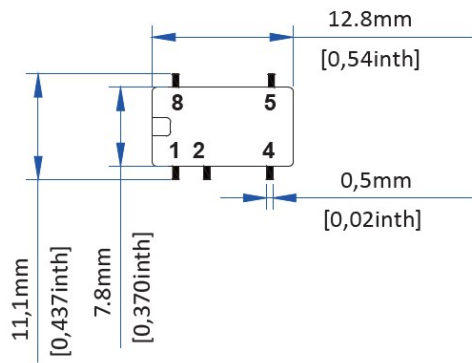
## Operation Environment Specifications

Maximum Operating Temperature	85°C
Minimum Operating Temperature	-40°C

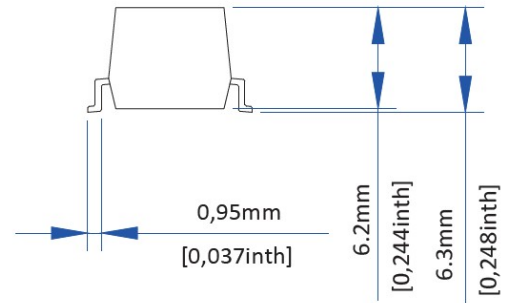
## Approvals

Compliance/Certifications	CE
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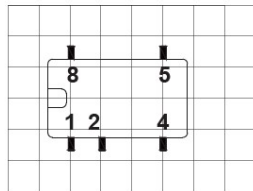
Top View



Side View



Recommended PCB size diagram

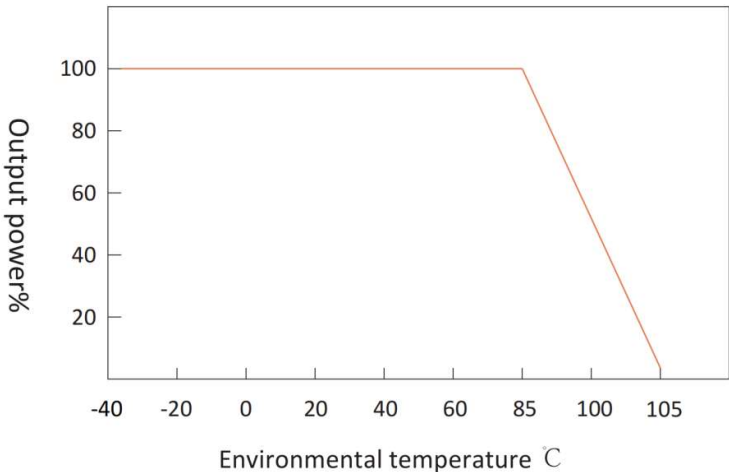


Grid distance 2.54 \* 2.54mm  
 Terminal section tolerance:  $\pm 0.10\text{mm}$  ( $\pm 0.004\text{inch}$ )  
 Unmarked tolerances:  $\pm 0.25\text{mm}$  ( $\pm 0.010\text{inch}$ )

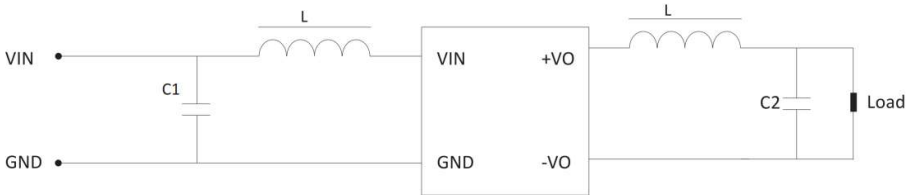
Pin definition

Pin	Definition
1	GND
2	VIN
4	0V
5	+Vo
8	NC
3.6.7	No Pin

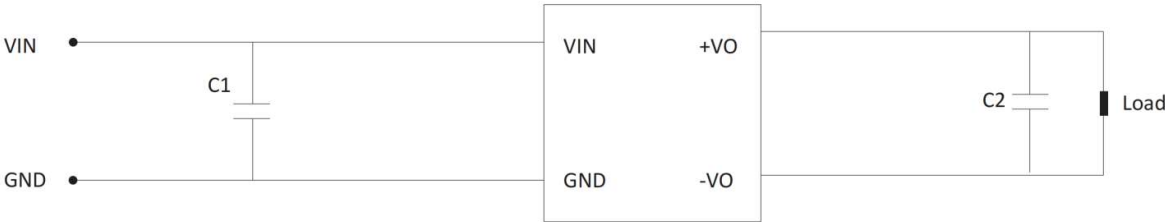
Temperature reduction curve



LC filtering circuit



Recommended basic application circuits



Input voltage	C1	output voltage	C2
3.3VDC	4.7uF	3.3VDC	10uF
5VDC	4.7uF	5VDC	4.7uF
12VDC	2.2uF	12VDC	2.2uF
15/24VDC	1uF	15/24VDC	1uF

Try to avoid no-load use: When the load power consumption is less than 10% of the output rated power of the module, it is recommended to connect a dummy load outside the output end or select a module with smaller rated power, the dummy load (resistance) can be calculated according to 10% of the rated power of the module, the resistance value  $R=U^2 / (10\% \times 1W)$ ;

The output external capacitor should not be too large: the capacity of the output external capacitor C2 should not be too large, otherwise it is easy to cause overcurrent or poor start when the module is started, which should be selected according to the capacitor external table;

The input of this series does not support parallel use of hot swap and output

For occasions with high ripple noise requirements, an external LC filter circuit should be connected, and the resonant frequency of the LC filter is much smaller than the switching frequency of the DC/DC module to prevent mutual interference, resulting in increased output ripple or module damage, as shown in the figure above: