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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



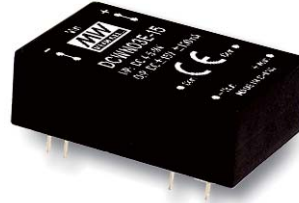
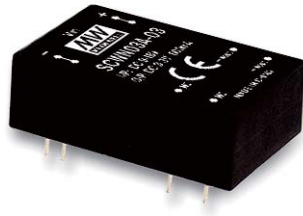
Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





■ Features

- DIP24 package with industry standard pinout
- 2:1 wide input range
- Operating temperature range -40 ~ +90°C
- No minimum load required
- Comply to EN55032 radiated Class A without additional components
- High efficiency up to 87%
- Protections: Short circuit (Continuous) / Overload / Input under voltage
- 3KVDC I/O isolation
- 3 years warranty

■ Applications

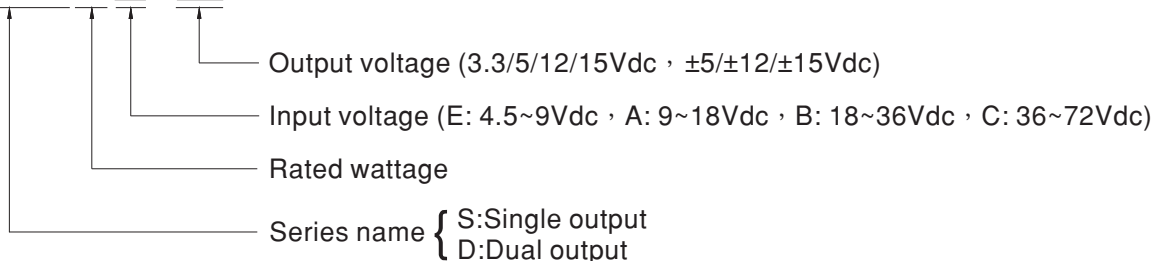
- Telecom/datacom system
- Wireless network
- Industrial control facility
- Instrument
- Analyzer
- Detector
- Data switch

■ Description

SCWN03 and DCWN03 series are 3W isolated and regulated module type DC-DC converter with DIP24 package. It features international standard pins, a high efficiency up to 87%, wide working temperature range -40~+90°C, 3KVDC I/P-O/P isolation voltage, Compliance to EN55032 radiated Class A without additional components, continuous-mode short circuit protection, etc. The additional components, models account for different input voltage 4.5~9V, 9~18V, 18~36V and 36~72V 2:1 wide input range, and various output voltage, 3.3V/5V/12V/15V for single output and ±5V/±12V/±15V for dual outputs, which are suitable for all kinds of systems, such as industrial control, telecommunication field, distributed power architecture, and so on.

■ Model Encoding

S **CWN03** **E** - **12**





MODEL SELECTION TABLE							
ORDER NO.	INPUT			OUTPUT		EFFICIENCY (TYP.)	CAPACITOR LOAD (MAX.)
	INPUT VOLTAGE (RANGE)	INPUT CURRENT		OUTPUT VOLTAGE	OUTPUT CURRENT		
		NO LOAD	FULL LOAD				
SCWN03E-03	5V (4.5 ~ 9V)	15mA	550mA	3.3V	600mA	73%	2200μF
SCWN03E-05		15mA	779mA	5V	600mA	78%	2200μF
SCWN03E-12		18mA	750mA	12V	250mA	80%	2200μF
SCWN03E-15		18mA	750mA	15V	200mA	81%	2200μF
DCWN03E-05		25mA	779mA	±5V	±0 ~ 300mA	77%	*1000μF
DCWN03E-12		25mA	750mA	±12V	±0 ~ 125mA	80%	*1000μF
DCWN03E-15		25mA	750mA	±15V	±0 ~ 100mA	80%	*1000μF
SCWN03A-03	12V (9 ~ 18V)	5mA	212mA	3.3V	600mA	78%	2200μF
SCWN03A-05		5mA	309mA	5V	600mA	82%	2200μF
SCWN03A-12		10mA	298mA	12V	250mA	84%	2200μF
SCWN03A-15		10mA	294mA	15V	200mA	85%	2200μF
DCWN03A-05		10mA	305mA	±5V	±0 ~ 300mA	82%	*1000μF
DCWN03A-12		12mA	298mA	±12V	±0 ~ 125mA	84%	*1000μF
DCWN03A-15		15mA	294mA	±15V	±0 ~ 100mA	85%	*1000μF
SCWN03B-03	24V (18 ~ 36V)	5mA	106mA	3.3V	600mA	78%	2200μF
SCWN03B-05		5mA	152mA	5V	600mA	82%	2200μF
SCWN03B-12		7.5mA	145mA	12V	250mA	86%	2200μF
SCWN03B-15		7.5mA	145mA	15V	200mA	86%	2200μF
DCWN03B-05		7.5mA	152mA	±5V	±0 ~ 300mA	82%	*1000μF
DCWN03B-12		10mA	147mA	±12V	±0 ~ 125mA	87%	*1000μF
DCWN03B-15		10mA	145mA	±15V	±0 ~ 100mA	87%	*1000μF
SCWN03C-03	48V (36 ~ 72V)	3mA	52mA	3.3V	600mA	80%	2200μF
SCWN03C-05		3mA	74mA	5V	600mA	84%	2200μF
SCWN03C-12		3mA	73mA	12V	250mA	86%	2200μF
SCWN03C-15		5mA	73mA	15V	200mA	87%	2200μF
DCWN03C-05		5mA	73mA	±5V	±0 ~ 300mA	85%	*1000μF
DCWN03C-12		5mA	73mA	±12V	±0 ~ 125mA	87%	*1000μF
DCWN03C-15		5mA	74mA	±15V	±0 ~ 100mA	87%	*1000μF

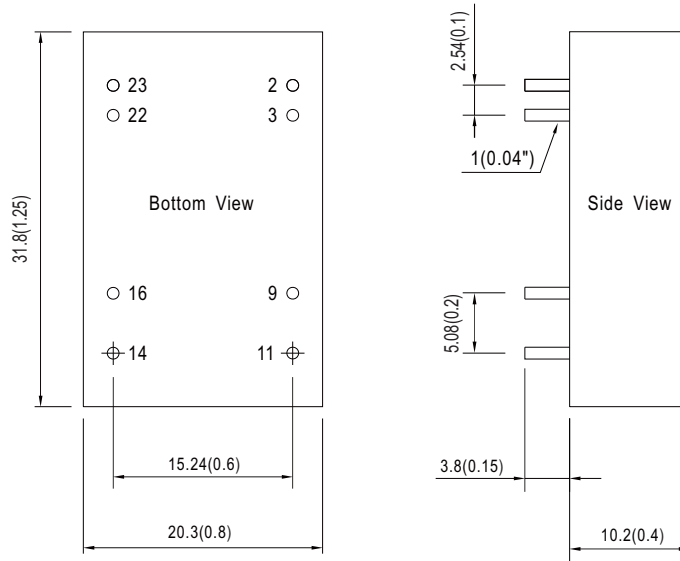
* For each output



SPECIFICATION				
INPUT	VOLTAGE RANGE	E: 4.5~9Vdc , A: 9~18Vdc , B: 18~36Vdc , C: 36~72Vdc		
	SURGE VOLTAGE (100ms max.)	5Vin models : 10Vdc ; 12Vin models : 25Vdc ; 24Vin models : 50Vdc ; 48Vin models : 100Vdc		
	FILTER	Pi type		
	PROTECTION	Fuse recommended. 5Vin models: 1.5A Fast-Acting Type, 12Vin models: 0.8A Fast-Acting Type, 24Vin models: 0.5A Fast-Acting Type, 48Vin models: 250mA Fast-Acting Type		
	INTERNAL POWER DISSIPATION	500mW		
OUTPUT	VOLTAGE ACCURACY	± 1.5%		
	RATED POWER	3W		
	RIPPLE & NOISE <small>Note.2</small>	50mVp-p		
	LINE REGULATION <small>Note.3</small>	± 0.5%		
	LOAD REGULATION <small>Note.4</small>	Single output models: ± 0.5%, Dual output models: ± 1%		
	SWITCHING FREQUENCY (Min.)	100KHz		
PROTECTION	SHORT CIRCUIT	Protection type : Continuous, automatic recovery		
	OVERLOAD	120 ~ 250% rated output power Protection type : Recovers automatically after fault condition is removed		
	UNDER VOLTAGE LOCKOUT	Start-up voltage	5Vin: 4.4Vdc, 12Vin: 8.8Vdc, 24Vin: 17Vdc, 48Vin: 34Vdc	
		Shutdown voltage	5Vin: 4.2Vdc, 12Vin: 8Vdc, 24Vin: 16Vdc, 48Vin: 31Vdc	
ENVIRONMENT	COOLING	Free-air convection		
	WORKING TEMP.	-40 ~ +90°C (Refer to "Derating Curve")		
	CASE TEMPERATURE	+100°C max.		
	WORKING HUMIDITY	20% ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +105°C, 10 ~ 95% RH non-condensing		
	TEMP. COEFFICIENT	0.03% / °C (0 ~ 85°C)		
	SOLDERING TEMPERATURE	1.5mm from case of 1 ~ 3sec./260°C max.		
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes		
SAFETY & EMC (Note.5)	WITHSTAND VOLTAGE	I/P-O/P:3KVDC		
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH		
	ISOLATION CAPACITANCE (Typ.)	250pF		
	EMC EMISSION	Parameter	Standard	Test Level / Note
		Conducted	EN55032(CISPR32)	N/A
		Radiated	EN55032(CISPR32)	Class A
	EMC IMMUNITY	Parameter	Standard	Test Level / Note
		ESD	EN61000-4-2	Level 2, ±8KV air, ±4KV contact
		Radiated Susceptibility	EN61000-4-3	Level 2, 3V/m
		EFT/Burest	EN61000-4-4	Level 1, 0.5KV
Surge		EN61000-4-5	Level 1, 0.5KV Line-Line	
Conducted		EN61000-4-6	Level 2, 3V(e.m.f.)	
Magnetic Field		EN61000-4-8	Level 2, 3A/m	
OTHERS	MTBF	2500Khrs MIL-HDBK-217F(25°C)		
	DIMENSION (L*W*H)	31.8*20.3*10.2mm (1.25*0.8*0.4 inch)		
	CASE MATERIAL	Non-Conductive black plastic (UL 94V-0 rated)		
	PACKING	12.5g		
NOTE	<p>1.All parameters are specified at normal input(E:5Vdc, A:12Vdc, B:24Vdc, C:48Vdc), rated load, 25°C 70% RH ambient.</p> <p>2.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1µf & 47µf capacitor.</p> <p>3.Line regulation is measured from low line to high line at rated load.</p> <p>4.Load regulation is measured from 10% to 100% rated load for SCWN03, 25% to 100% rated load for DCWN03.</p> <p>5.The final equipment must be re-confirm that it still meet EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."(as available on http://www.meanwell.com)</p>			

Mechanical Specification

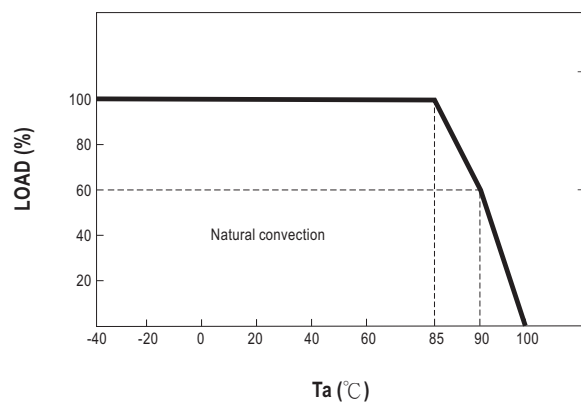
- All dimensions in mm(inch)
- Tolerance: $x.x \pm 0.5\text{mm}$ ($x.xx \pm 0.02''$)
 $x.xx \pm 0.25\text{mm}$ ($x.xxx \pm 0.010''$)
- Pin size is: $0.5 \pm 0.05\text{mm}$ ($0.02'' \pm 0.002''$)



Plug Assignment

Pin-Out		
Pin No.	SCWN03 (Single output)	DCWN03 (Dual output)
2,3	-Vin	-Vin
9	N.C.	Common
11	N.C.	-Vout
14	+Vout	+Vout
16	-Vout	Common
22,23	+Vin	+Vin

Derating Curve



Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>