

Overview

Wide Range DC Stabilizer is a DC-to-DC converter with buck and boost features. It is capable of delivering steady 12VDC output (up to 1.5A Load) for commercial appliances even if an unstable DC supply is given as an Input.

For example, an appliance needs constant 12VDC but its DC power supply fluctuates lower or higher than the desired 12VDC; Wide Range DC Stabilizer generates steady 12VDC for the appliance despite its inconsistent DC input.



Features

- Switch mode power supply
- Using Buck, Boost technology
- Wide input range lower or higher than the output
- Protections: Short circuit / Overload / Over voltage
- 100% full load burn-in test
- Cooling by free air convection via casing
- Built-in constant current limiting circuit
- All using 105°C long life electrolytic capacitors
- Reverse polarity protection @ input and output
- LED for power indication

Applications

It can be used for appliances which needs constant 12VDC power supply

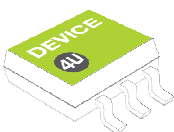
General Specification

- ✓ Input Voltage Range: 8VDC to 35VDC
- ✓ Output Voltage 12VDC (@1.5A Max)
- ✓ Built in Under Voltage cutoff @ 8VDC
- ✓ Overvoltage Protection @ > 35VDC
- ✓ Built in Over Current Protection @ Output (1.5A)
- ✓ Built in Over Current Protection @ Input (3.2A Max)
- ✓ Reverse Polarity Protection @ Input & Output



TECHNICAL SPECIFICATION

SPECIFICATION		DESCRIPTION		
Model		SC8-35OP1D5A12		
Power Supply (Output)	DC voltage	12V		
	Rated current	Up to 1.5A		
	Current range	0 ~ 1.5A		
	Rated power	19W		
	Reverse polarity protection	300V		
	Setup, Rise time	>0.5%		
	Ripple and noise (max)	>1.0%		
	Voltage Tolerance (NOTE2)	~8%		
	Efficiency (Type) (NOTE1)	~80%		
	Overload protection	Switches off > 1.5A load (NOTE3)		
Over current limit during normal or reverse polarity	2A			
Power Supply (Input)	Inrush current (Type)	Approximately 3.0A		
	DC current (Type@MAX load)(NOTE1)	3A @ 8V input	1.95A@12V input	0.95A@24V input
	Over voltage protection	>35VDC		
	Over current limit during normal or reverse polarity	Switches off @ ~8VDC		
	Under voltage protection			
Others	Dimension	94 x 41 x 28mm (L x W x H)		
	Switching method	PWM		
	DC to DC concept	SMPS with Buck and Boost capability		
	Heat dissipation	Via casing		
	Operating frequency (Type)	200KHZ (NOTE 4)		
NOTE	1. All parameters not specially mentioned are measured at 8, 12, 24VDC input @ 1.5A load and 23°C of ambient temperature.			
	2. Tolerance: Minor variance may occur (0.xxx VDC) due to input variation or load variation. However, WRDS will still provide 12VDC output with steady load.			
	3. Steady current limiting, recovers automatically after fault condition is removed.			
	4. WRDS may adjust its switching frequency to buck or boost depending on the input voltage in order to provide steady output voltage @ constant load.			

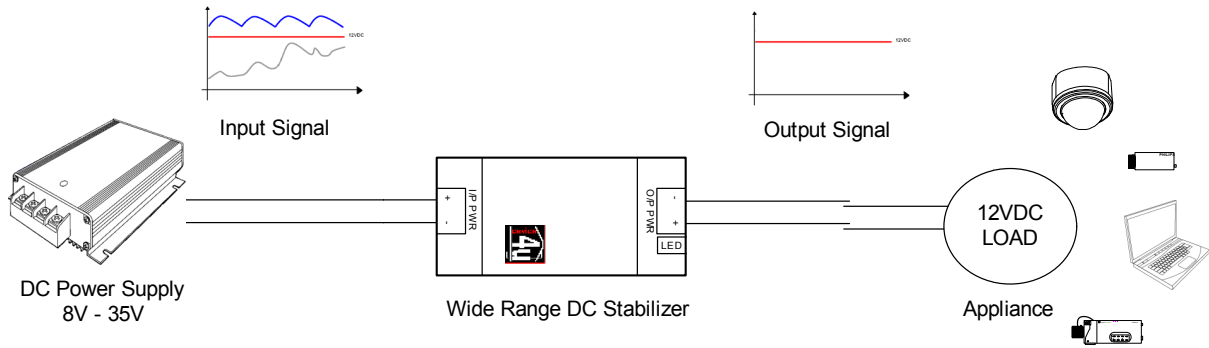


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APPLICATION DIAGRAM



MECHANICAL DRAWINGS

