

KEY FEATURES

- Power Module for PCB Mountable
- Smaller Size with High Efficiency
- 4:1 Wide Input Range
- Regulated Output
- Low Ripple and Noise
- Screw Terminal For Optional
- Operating Temperature: -40°C...+85°C (with derating)
- Remote ON/OFF Control (Optional)
- 3-Year Product Warranty


ELECTRICAL SPECIFICATIONS

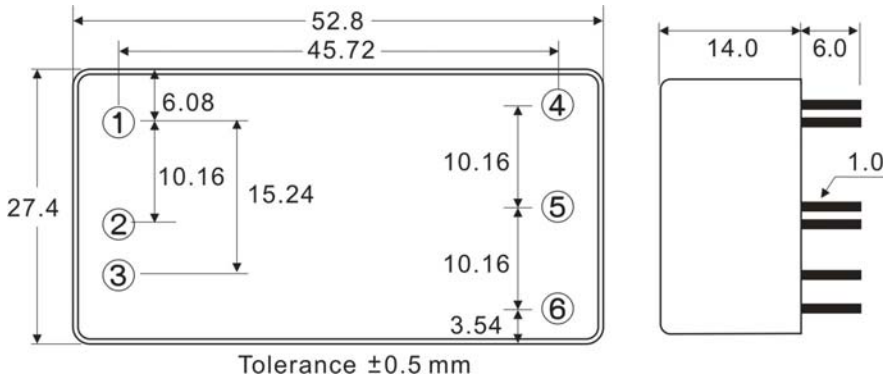
All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Model No. (Single Output)	ST60-48-5S	ST60-48-12S	ST60-48-15S	ST60-48-24S	
Max Output Wattage (W)	50W	60W			
Input	Input Filter	π type			
	Voltage	48V (18-75V)			
Output	Voltage (V.DC.)	5	12	15	24
	Trim Voltage Range	$\pm 10\%$			
	Voltage Accuracy	$\pm 2\%$			
	Current (mA) max	10,000	5000	4000	2500
	Line Regulation (LL-HL) (typ.)	$\pm 0.5\%$			
	Load Regulation (10-100%) (typ.)	$\pm 2\%$			
	Capacitor Load (max)	4700uF	680uF	680uF	120uF
	Ripple	50 mV max.	<0.2% Vout +40mV max (Vp-p)		
	Noise	100 mV max.	<0.5% Vout +50mV max (Vp-p)		
	Efficiency	89%	91%	88%	88%
Switching Frequency	200KHz				
Protection	Over Power Protection	Works over 120% of rating and recovers automatically.			
	Over Voltage Protection	Zener diode clamp			
	Short Circuit Protection	Current limit, auto-recovery			
Isolation	Voltage	1600 VDC.			
	Resistance	10^8 ohms			
	Capacitance	1000 pF			
Environment	Operating Temperature	-40°C...+85°C (with derating)			
	Storage Temperature	-55°C...+105°C			
	Case Temperature	+105°C max.			
	Temperature Coefficient	$\pm 0.02\%$ Per°C			
	Thermal Impedance	Natural Convection (20LFM)		Without Heat-Sink With Heat-sink	
	Humidity	95% RH			
	MTBF	>550,000 h @ 25°C (MIL-HDBK-217F)			
Physical	Dimension (L x W x H)	2.08 x 1.08 x 0.55 Inches (52.8 x 27.4 x 14.0 mm) Tolerance ± 0.5 mm			
	Case Material	Five-side shielded Aluminum with Non-Conductive base, Black Anodize			
	Weight	50 g			
	Cooling Method	Free-air convection			
Safety	Agency Approvals	CE, UL, cUL (Pending)			
EMC	EMI (Conducted & Radiated Emission)	EN 55022 class A (Pending)			
	EMS (Noise Immunity)	EN 55024 (Pending)			

NOTE

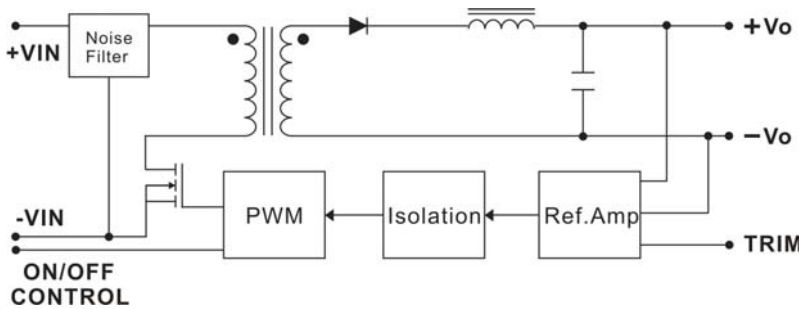
Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.

MECHANICAL DIMENSION (Top View)

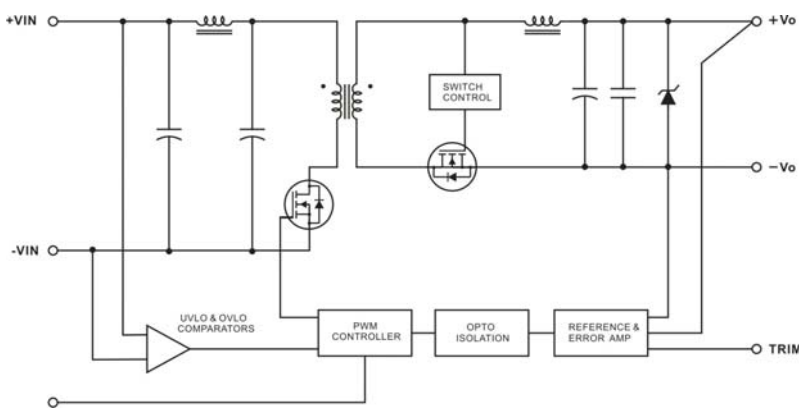


PIN#	Single
1	CTRL
2	-DC IN
3	+DC IN
4	TRIM
5	-DC OUT
6	+DC OUT

BLOCK DIAGRAM

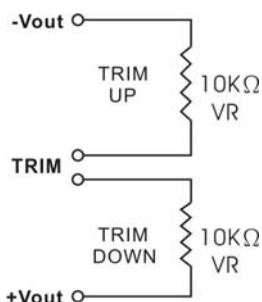


Output Voltage (V.DC) : 24V

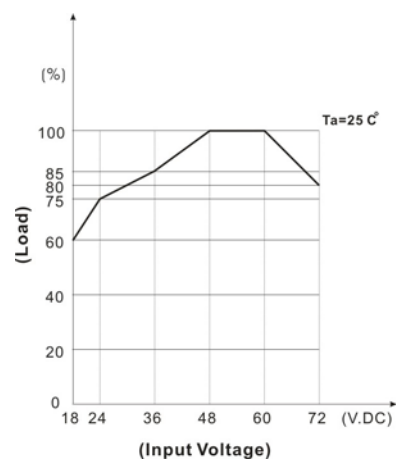
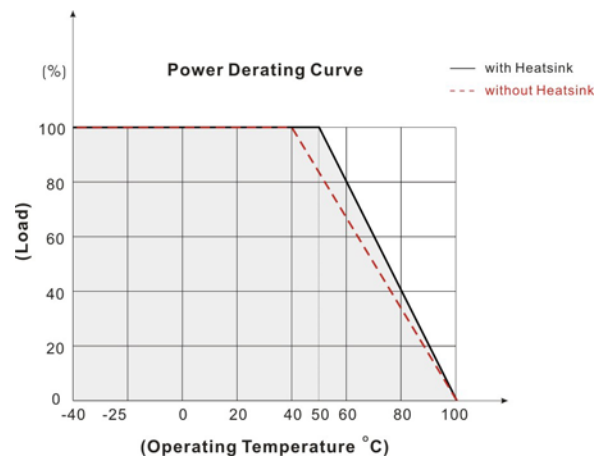


Output Voltage (V.DC) : 5V, 12V, 15V

TRIM



DERATING



ST60 SERIES

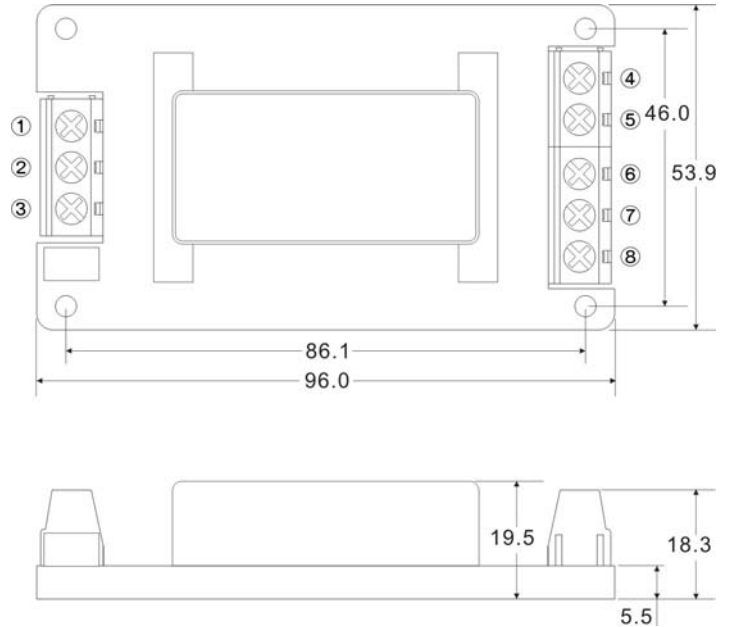
60 Watts

SCREW TERMINAL

ST60-A2



PIN#	Single
1	CTRL
2	-DC IN
3	+DC IN
4.	TRIM
5	-DC OUT
6	NO CONNECT
7	+DC OUT
8	NO CONNECT



ST60-A5



PIN#	Single
1	CTRL
2	-DC IN
3	+DC IN
4.	TRIM
5	-DC OUT
6	NO CONNECT
7	+DC OUT
8	NO CONNECT

