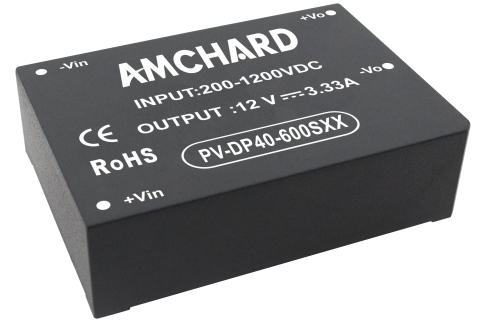


Features:

1. Ultra-wide input voltage range (200-1200VDC)
2. Size 89*63*25mm
3. No load power consumption<0.6W
4. Input reverse polarity protection, output short circuit/ over load/ over temperature/ over voltage protection
5. Operating temperature range: -40°C to +70°C
6. 3000V isolation voltage
7. 100% high temperature burn-in and function test
8. 3 years warranty



Designed for Photovoltaic power generation, Renewable energy system, High voltage frequency conversion, Industrial control system, Semiconductor fabrication equipment, Electro-mechanical apparatus, DC bus centralized application, Energy storage system(ESS), Charging pile, Third rail.

Selection Guide

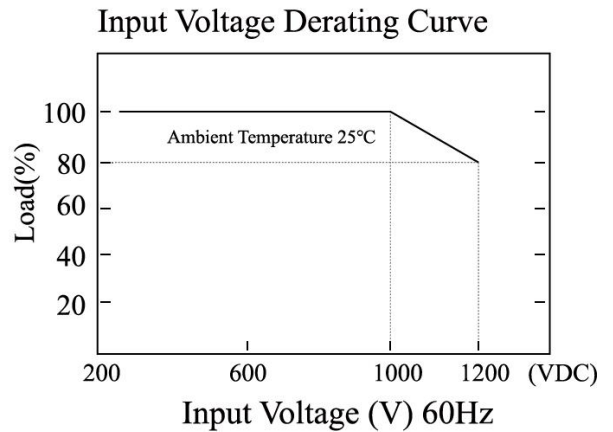
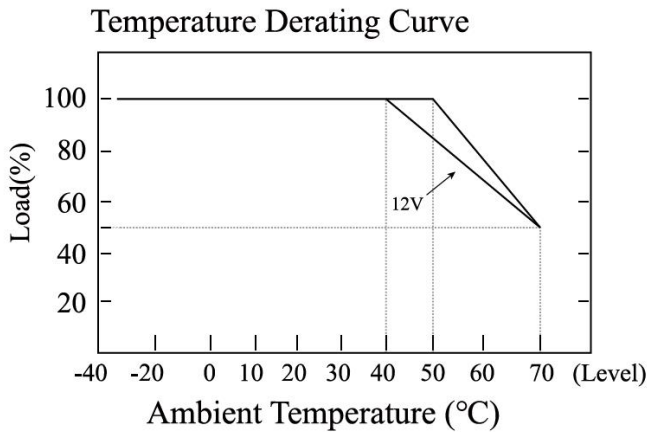
Model	Input Voltage	Rated Power (W)	Output Voltage (V)	Output Current (A)	Ripple & Noise (mVp-p)	Efficiency (%)
PV-DP40-600S12	600VDC (200-1200)	40	12	3.33	100	85
PV-DP40-600S15		40	15	2.66	100	85
PV-DP40-600S24		40	24	1.66	100	87

Specifications

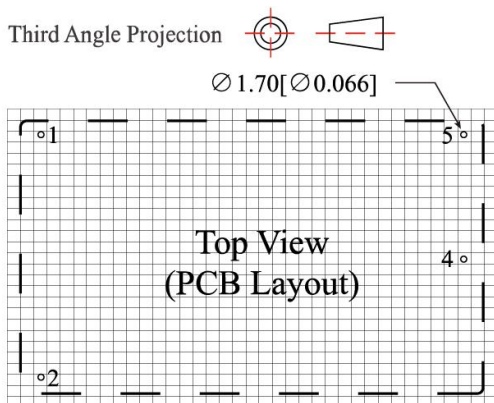
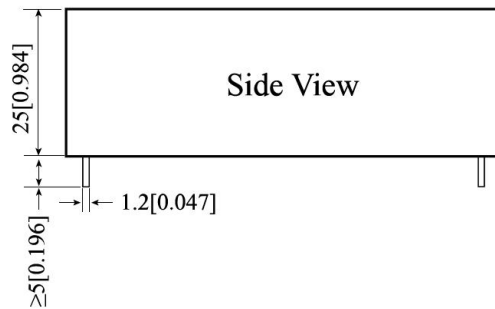
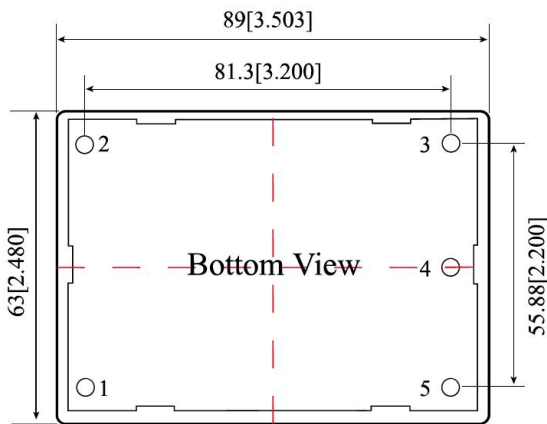
OUTPUT	Voltage Tolerance	±1.0% (±2.0% max)				
	Line Regulation	±1.0%				
	Load Regulation	±1.0%				
	Setup, Rise Time (Typ.)	2000ms/600VDC at full load				
	Hold Up Time (Typ.)	30ms/600VDC at full load				
	Ripple & Noise (Max.) (Note 2.)	150mV				
INPUT	Voltage Range	200-1200VDC				
	Nominal Voltage	600VDC				
	Current (Typ.)	500mA/600VDC				
	Inrush Current (Typ.)	60A/600VDC				
	External Fuse Recommended	4A/1500V				
PROTECTION	Over Load	≥110% load, recovers automatically after fault condition is removed				
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed				
	Over Temperature	Output off				
	Over Voltage (Note 4.)	Output voltage clamp				
			Voltage	12VDC	15VDC	24VDC
	Range	≤16VDC	≤18VDC	≤32VDC		
ENVIRONMENT	Working Temp.	-40°C to +70°C (Refer to "Derating curve")				
	Working Humidity	85%RH max				
	Storage Temp., Humidity	-40°C to +85°C, 10-95%RH				
	Temp. Coefficient	0.03%/ (0-50°C)				
	Vibration	10-500Hz, 2G, 10min./1cycle, 60min.each along X, Y, Z axes				
SAFETY & EMC (NOTE 3.)	Safety Standards	EN62368, EN60601, UL62368				
	Isolation Voltage	I/P-O/P: 3000VAC				
	Isolation Resistance	I/P-O/P: >100M Ohms/500VDC 25°C 70% RH				
	EMC Emission & Immunity	EN55011, EN55032 (CISPR32) CLASS B				
	ESD	IEC/EN 61000-4-2 level 4 Contact ±8kV/Air ±15kV (Refer to "Typical Application")				
	RF	IEC/EN 61000-4-3	(Refer to "Typical Application")			
	EFT	IEC/EN 61000-4-4 level 3 2kV	(Refer to "Typical Application")			
	Surge	IEC/EN 61000-4-5 level 4 1kV	(2KV Refer to "Typical Application")			
OTHERS	MTBF	200K hrs min. MIL-HDBK-217F (25°C)				
	Dimension	89*63*25mm (L*W*H)				
	Weight	180g/PCS 9kg/Carton				
	Package	48 PCS/Carton				
	Carton Size	360*300*250mm				

NOTE	1. All parameters not specially mentioned are measured at nominal input, rated load and 25°C of ambient temperature.
	2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor and connected according to "typical application". Element parameters shall be the same as those measured in the suggestion form.
	3. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives.
	4. This series of overvoltage protection protects the subsequent circuit in case of module abnormality through the peripheral TVS tube.

Derating Curve



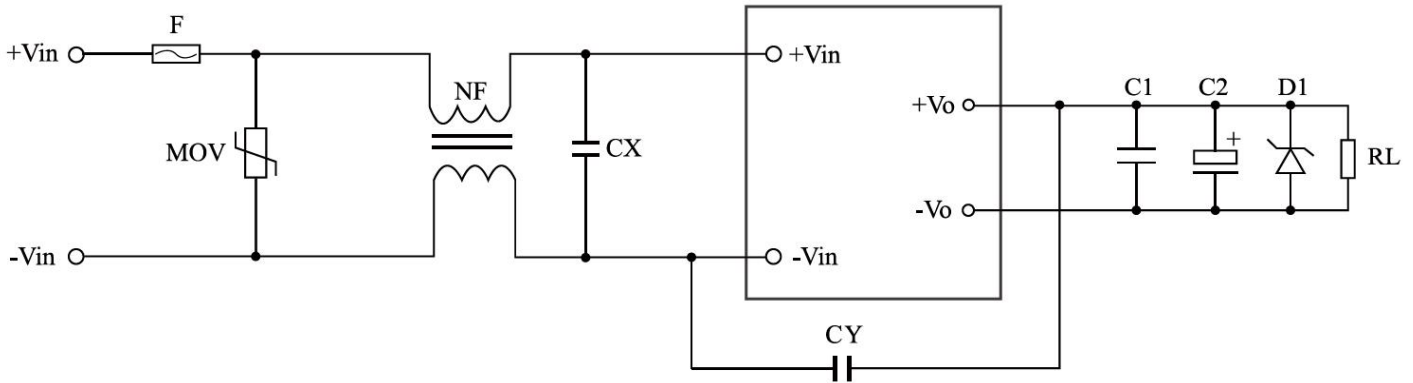
Dimensions & Function



Pin	Function
1	-Vin
2	+Vin
3	No Pin
4	-Vo
5	+Vo

NOTE: Unit size: mm[inch] Unmarked tolerances: ±0.5mm

Typical Application



List Of Components

Position Model	F (Optional)	MOV (Required)	NF	CX	CY	C1(Optional)	C2(Optional)	D1 (Optional)
PV-DP40-600S12	4A/1500V	Varistors 20D162K	Common mode inductance 1- 10mH	224K/1500V	222K/1500V	104K/50V (Ceramic capacitor)	100uF-1000uF/16V	P6KE16A
PV-DP40-600S15							100uF-1000uF/25V	P6KE20A
PV-DP40-600S24							100uF-1000uF/35V	P6KE33A

Notes:

1. If the product works under the minimum required load, it cannot guarantee that the performance of the product complies with all the performance indicators in this manual;
2. The maximum capacitive load is tested under the input voltage range and full load condition;
3. Unless otherwise stated, all indexes in this manual are measured at Ta=25°C, humidity <75%RH, nominal input voltage and rated output load;
4. All index testing methods in this manual are based on the enterprise standards of the company;
5. Our company can provide product customization, specific needs can directly contact our technical staff;
6. AMCHARD reserves the right to make changes to the product at any time without notice.