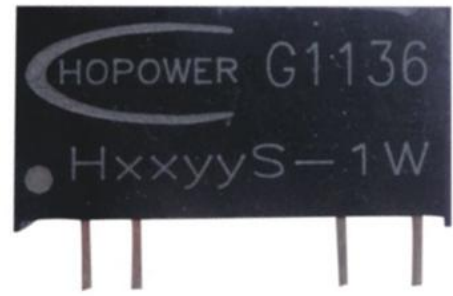


Features

- ★ Small Footprint
- ★ In-Out Isolation Voltage 4500 VDC
- ★ (7 PIN) SIP Package
- ★ Temperature Range:-40°C to +85°C
- ★ UL94V-0 Inflamming retarding package
- ★ MTBF>1million hours(25°C)



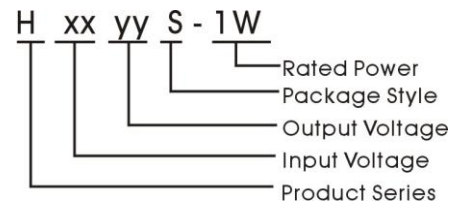
Applications

The H_S-1W Series are designed for application where isolated output is required from a distributed power system.

These products apply to where:

- 1) 4500 VDC input and output isolation;
- 2) Input voltage variation $\leq \pm 10\%$;
- 3) Regulated and low ripple noise is not required.

Such as: digital circuits, and IGBT power device driving circuits.



Model Detail List Specification

Model Number	Input Voltage range (nominal voltage)	Output Voltage	Output Current (mA)		Input Current full load. (mA)		Efficiency	Max. Capacitive Load(μ F)
			Min.	Max.	Max.	Min.		
H0505S-1W	4.5~5.5VDC (5 VDC)	5.0V	20	200	256	38	78%	200
H0509S-1W		9.0V	11	111	266		75%	
H0512S-1W		12.0V	8	83	255		78%	
H0515S-1W		15.0V	6	67	257		78%	
H1205S-1W	10.8~13.2VDC (12 VDC)	5.0V	20	200	111	30	75%	
H1209S-1W		9.0V	11	111	111		75%	
H1212S-1W		12.0V	8	83	105		79%	
H1215S-1W		15.0V	6	67	84		79%	
H2405S-1W	21.6~26.4VDC (24 VDC)	5.0V	20	200	57	26	73%	
H2409S-1W		9.0V	11	111	55		75%	
H2412S-1W		12.0V	8	83	53		78%	
H2415S-1W		15.0V	6	67	53		78%	

Common Specifications

Item	Test Conditions	Min.	Typ.	Max.	Unit
Isolation Voltage	Tested for 1 minute and leakage current less than 1 mA	4500			VDC
Switching Frequency	Full load, nominal input		100		KHz
MTBF	MIL-HDBK-217F@25°C	1000			K hours
Isolation Resistance	Test at 500VDC	1000			M Ω
Isolation Capacitance			300		pF
Weight			2.5		g

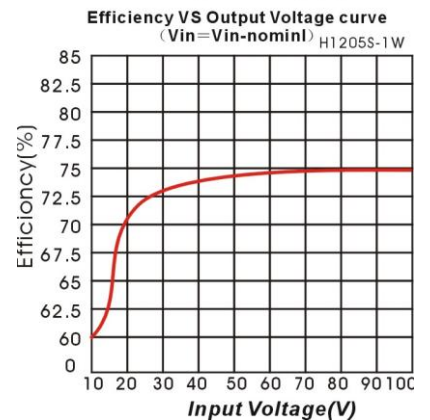
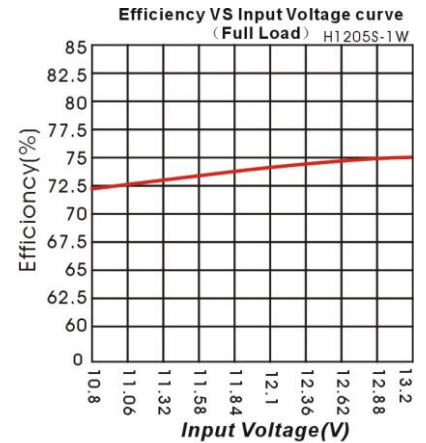
HS-1W Series



Output Specifications

Item	Test Conditions	Min.	Typ.	Max.	Unit
Output Power		0.1		1	W
Line Voltage Regulation	For Vin change of ±1%			±1.5	%
Load regulation	10% to 100% load	5V output	10	15	
		12V output	8	15	
		15V output	6	15	
		24V output	6	15	
Ripple	20MHz Bandwidth		50		mVp-p
Noise			75		
Temperature Drift	100% full load			±0.03	%/°C
Input Filter		C Filter			

Product typical Curve



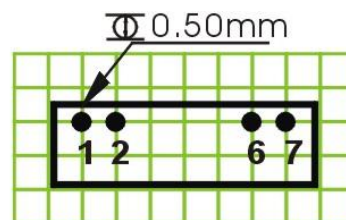
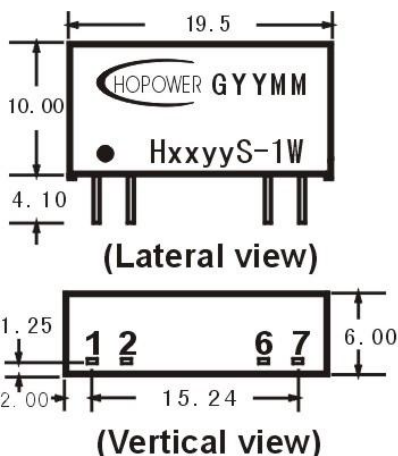
Input Specifications

Item	Test Conditions	Min.	Typ.	Max.	Unit
Input Max. voltage	5 VDC Input (4.5~5.5V)			6	VDC
	12 VDC Input (10.8~13.2V)			14.4	
	24 VDC Input (21.6~26.4V)			28.8	
Input surge voltage (1 sec. Max.)	5 VDC Input (4.5~5.5V)	-0.8		10	VDC
	12 VDC Input (10.8~13.2V)	-0.8		20	
	24 VDC Input (21.6~26.4V)	-0.8		32	

Environmental Specifications

Item	Test Conditions	Min.	Typ.	Max.	Unit
Storage Humidity	Non condensing			95	%
Temp. rise at full load			25	45	°C
Operating Temperature		-40		+85	
Storage Temperature	Power derating (above 85°C)	-55		+125	
Soldering Temperature	1.5mm from case for 10 seconds			300	
Cooling		Free air convection			

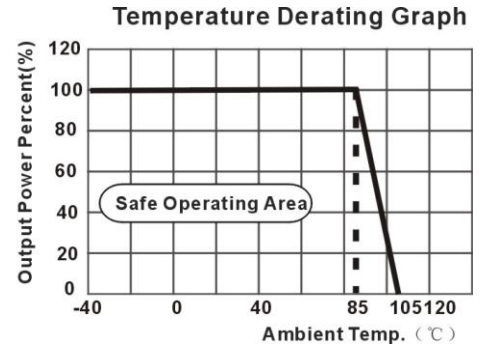
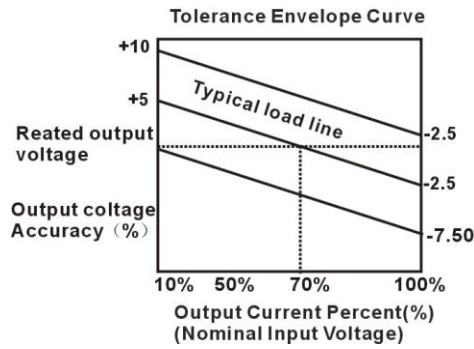
Mechanical Dimensions & Recommended Footprint



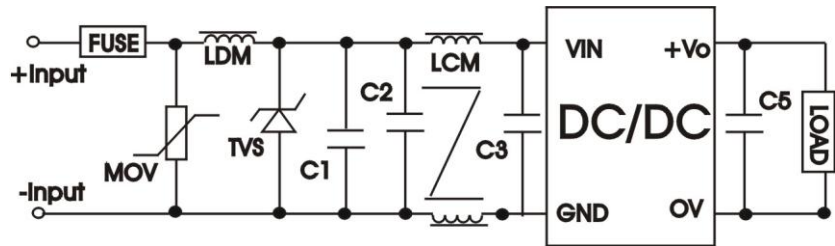
Note: Grid 2.54*2.54mm.
Unit: mm
General tolerances : 0.20mm

Package	Vin	GND	OV	+Vo
HS	1	2	6	7

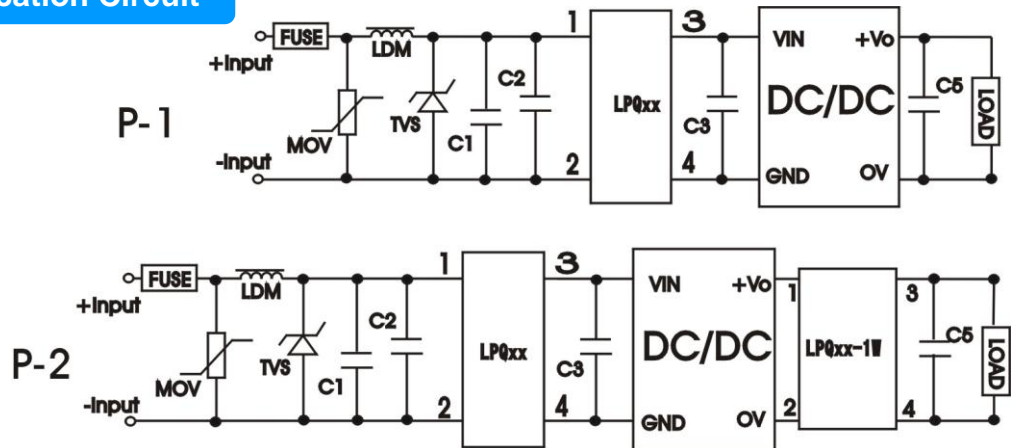
Tolerance Envelope Curve & Temperature Derating Graph



EMC Recommended Circuit



EMC Module Application Circuit



Model test Circuit

