

Input Voltage	Output Voltage (V)	Output Current (MA)	Ripple&Noise ² (MA)	Efficiency (%)	Isolation Capacitive (PF)	MTTF ¹ (KHRS)
		100	40	60	3.0	4950
		55	30	65	3.0	3832
			20	65	3.0	2770
			20	65	3.0	1903
				60	3.0	3688
					3.0	3029
					3.0	2324
						1682
						13780
						13460

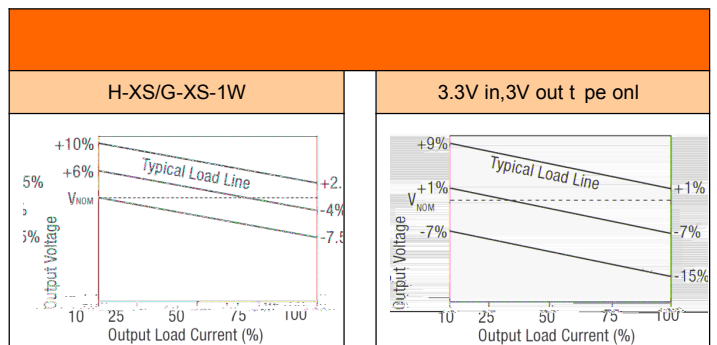
Parameter	Conditions	Min.	T p.	Ma...	Units	
Rated Power ¹	TA=-40 60	0.1		1	W	
Voltage Set Point	See tolerance envelope					
Line regulation	High Vin to low Vin		1.0	1.2	%%	
Load regulation	10% load to rated load,....03		10.0	15.0	%	
	10% load to rated load,0505		7.0	10.0		
	Single outputs	10% load to rated load,0509,0512,0515		6.0		10.0
	10% load to rated load,12.....		5.0	7.0		
Load regulation	10% load to rated load,5V output t pes		10.0	15.0	%	
	10% load to rated load,9V output t pes		6.0	10.0		
	Dual outputs	10% load to rated load,12V output t pes		6.0		10.0
	10% load to rated load,15V output t pes		6.0	10.0		
Zero Load Power	All t pes		250		MW	

Parameter	Conditions	Min.	T p.	Ma...	Units
Isolation test voltage	Flash tested for 1 second	5200			VDC
Resistance	Viso=500VDC		1		G

Parameter	Conditions	Min.	T p.	Ma...	Units
Switching frequenc	Single output		45		kH
	Dual output		70		

Parameter	Conditions	Min.	T p.	Ma...	Units
Specification	All output t pes	-40		60	
Storage		-55		130	
Case Temperature above	All output t pes			33	

Parameter	Conditions	Min.	T p.	Ma...	Units



¹ See derating graph.
All specifications typical at TA=25 °C, nominal input voltage and rated output current unless otherwise specified. Another 24V & 48V products, please inquire Our technical department!

"Hi Pot Test", "Flash Tested", "Withstand Voltage", "Proof Voltage", "Dielectric Withstand Voltage" & "Isolation Test Voltage" are all terms that relate to the same thing, a test voltage. Applied for a specified time, across a component designed to provide electrical isolation, to verify the integrity of that isolation.

Professional Power Module H_XS-1W&G_XS-1W series of DC/DC converters are all 100% production tested at their stated isolation voltage. This is 6KVDC for 1 second.

A question commonly asked is, "What is the continuous voltage that can be applied across the part in normal operation?"

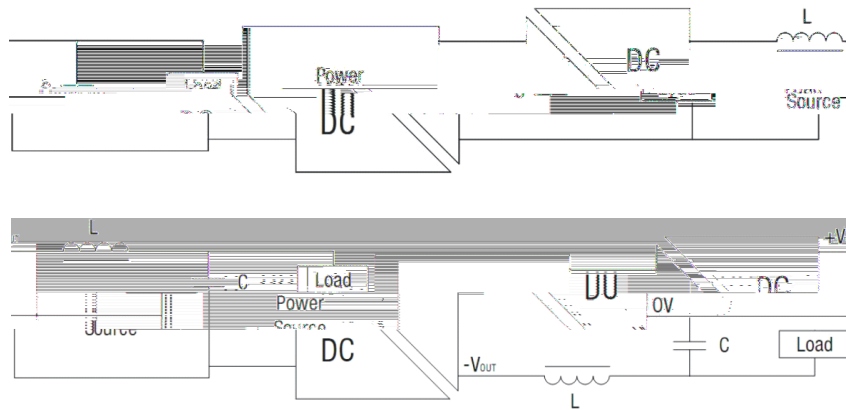
The H_XS-1W&G_XS-1W series has been recognized by Underwriters Laboratories to 300Vrms for Supplemental Insulation and 150Vrms for Reinforced Insulation.

It is well known that repeated high-voltage isolation testing of a barrier component can actually degrade isolation capability, to a lesser or greater degree depending on materials, construction and environment. We therefore strongly advise against repeated high voltage isolation testing, but if it is absolutely required, that the voltage be reduced by 20% from specified test voltage.

By using the values of inductance and capacitance stated, the output ripple at the rated load is lowered to 5mV p-p maximum.

Capacitor: Ceramic chip capacitors are recommended. It is required that the ESR (Equivalent Series Resistance) should be as low as possible. X7R types are recommended. The voltage rating should be at least twice (except for 15V output), the rated output voltage of the DC/DC converter.

Inductor: The rated current of the inductor should not be less than that of the output of the DC/DC converter. At the rated current, the DC resistance of the inductor should be such that the voltage drop across the inductor is <2% of the rated voltage of the DC/DC converter. The SRF (Self Resonant Frequency) should be >20MHz.

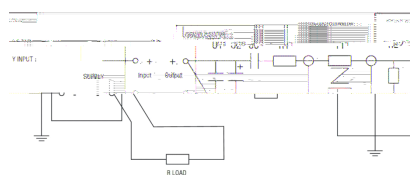


Ripple & Noise Characterization Method

Ripple and noise measurements are performed with the following test configuration.

C1	1uF X7R multilayer ceramic capacitor, voltage rating to be a minimum of 3 times the output voltage of the DC/DC converter
C2	10uF tantalum capacitor, voltage rating to be a minimum of 1.5 times the output voltage of the DC/DC converter
C3	100nF multilayer ceramic capacitor, general purpose
R1	450 ohm resistor, carbon film, 1% tolerance
R2	50 ohm BNC termination
T1	3T of the coaxial cable through a ferrite toroid
RLOAD	Resistive load to the maximum power rating of the DC/DC converter. Connections should be made via twisted wires
R3	50 ohm resistor, carbon film, 1%

Measured values are multiplied by 10 to obtain the specified values.



*Pin not fitted on single output variants.
All dimensions in inches 0.01(mm 0.25mm).All pins on a 0.1(2.54) pitch and within 0.01(0.25)of true position. Weight: 4.3g

1	+VIN	1	+VIN
2	-VIN	2	-VIN
5	-VOUT	5	-VOUT
7	+VOUT	6	0V
		7	+VOUT

*Hole not required for single output variants.
Unless otherwise stated all dimensions in inches 0.01(mm 0.25mm).

Unless otherwise stated all dimensions in inches 0.02(mm 0.5mm).
Tube length(7 Pin SIP):20.669(525mm 2mm). Tube Quantit :25