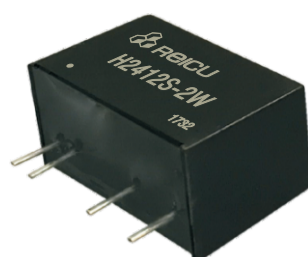


**Features**

- RoHS compliant
- Efficiency up to 81%
- 6kVDC Isolation
- Single output
- Internal SMD Construction
- Continuous short circuit Protection
- Wide temperature performance at full 2Watt load, -40°C to 85°C
- SIP Package



**Model Selection Guide**

Order Code	Vin(V)		Output		Max capacitive Load	Efficiency(%) (Typ)
	Nominal	Range	Vo(V)	Io(mA)		
H0505S-2W	5	4.5-5.5	5	400	330	73
H0509S-2W			9	222	220	76
H0512S-2W			12	167	220	77
H0515S-2W			15	133	220	77
H0524S-2W			24	83	150	79
H1205S-2W	12	10.8-13.2	5	400	330	75
H1209S-2W			9	222	220	78
H1212S-2W			12	167	220	80
H1215S-2W			15	133	220	79
H1224S-2W			24	83	150	81
H2405S-2W	24	21.6-26.4	5	400	330	75
H2409S-2W			9	222	220	78
H2412S-2W			12	167	220	80
H2415S-2W			15	133	220	80
H2424S-2W			24	83	150	82

\*All the specifications typical at Ta=+25°C resistive load, nominal input voltage and rated output current unless otherwise noted.

**Input Characteristics**

Parameter	Condition	Min	Typ	Max	Units
Input Surge Voltage (1 sec. Max.)	3.3V Input Models	-0.7	--	6	VDC
	5V Input Models	-0.7	--	9	
	12V Input Models	-0.7	--	18	
	24V Input Models	-0.7	--	30	
Input Filter	All Models	Internal Capacitor			

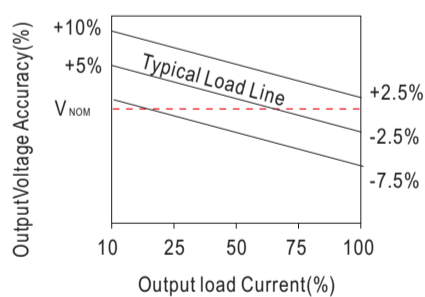
**Output Characteristics**

Parameter	Condition	Min	Typ	Max	Units
Line regulation	Vin change 1%	±1.2	--	±1.5	%
Switching frequency	Full load, nominal input	--	100	--	KHz
Load regulation	10%~100% load	6.5	--	15	%
Ripple and noise	BW=DC to 20MHz	--	75	≤100	mVp-p
Short circuit Protection	Continuous, Automatic Recovery				

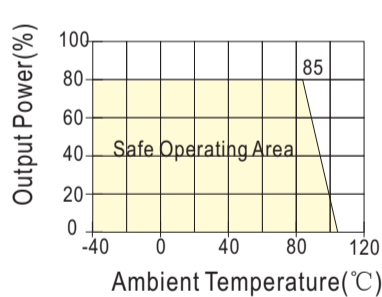
**General Characteristics**

Parameter	Condition	Min	Typ	Max	Units
Operating Temperature	All output types	-40	--	+85	°C
Storage		-55	--	+125	°C
Storage humidity		--	--	+95	%
Cooling	Free air convection	--	--	--	
Isolation voltage	1mA≤1minute	--	6000	--	VDC
Isolation resistance	500VDC	1000	--	--	MΩ
Switching Frequency		--	100	--	KHz
MTBF	3.5×10 <sup>6</sup>				K hours

**Tolerance Envelopes Curve**

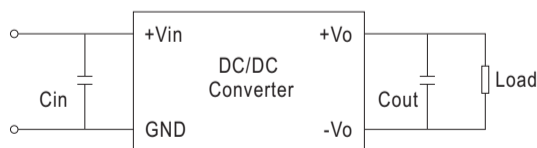


**Temperature Derating Graph Curve**



**Input/Output Ripple Reduction**

Reduce output ripple, it is recommended to use capacitors at the input/output.



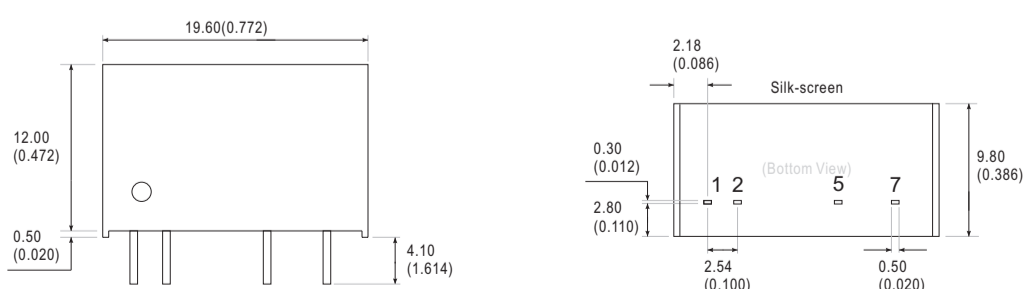
**External Capacitor Table**

Parameter	5	12	15	24	
Vin(VDC)	5	12	15	24	
Cin(uF)	4.7	2.2	2.2	1	
Vout(VDC)	5	9	12	15	24
Cout(uF)	10	4.7	2.2	1	0.47

**Note**

1. To ensure this module can operate efficiently and reliably, During operation, the minimum output load is not less than 10% of the full load.
2. Other input and output voltage may be available, please
3. Specifications subject to change without notice

**Mechanical Dimension & Pin Connections**



Note:  
Unit:mm(inch)

Pin	1	2	5	7
Function	Vin	GND	-Vo	+Vo