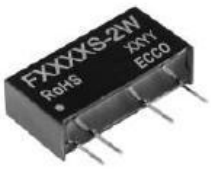
ECCO Electronics Technology Co.,ltd

F_S-2W series

Typical Performance

FEATURES

- Fixed Input, isolation, unregulated Output,single output,2W
- Isolation voltage: 3000VDC
- SIP package
- Efficiency :up to 80%
- Working temperature -40℃~+85℃
- MTBF≥35x10^{5}Hrs
- Industry standard pinout
- No heat sink required
- No external component required
- In line with RoHS codes
- Line regulation (for Vin change of ±1%): ±1.2%(max)
- Load regulation (10%-100% load) :15%
- Ripple and noise (20MHz Band width) <75mVp-p
- Temperature drift(100% full load):±0.03%/℃(max)
- Switching Frequency(Full load,nominal input):70Khz(typ)
- Storage Temperature:-55℃~+125℃
- Isolation Resistance:1000MΩ/1min
- Cooling:Free aire converction



3-Years Product Warranty

Product Program

Part #	Input voltage range	Nominal output voltage / output current						Efficiency (%, typ)
		VO1			VO2			
		Voltage (VDC)	Min (mA)	Max (mA)	Voltage (VDC)	Min (mA)	Max (mA)	
F0503S-2W	5V（4.5~5.5VDC）	3.3		400				74
F0505S-2W		5		400				81
F0509S-2W		9		222				83
F0512S-2W		12		167				83
F0515S-2W		15		133				83
F0524S-2W		24		83				84
F1205S-2W	12 V（10.8~13.2VDC）	5		400				80
F1209S-2W		9		222				82
F1212S-2W		12		167				83
F1215S-2W		15		133				83
F1224S-2W		24		83				82
F1505S-2W	15V(13.5~16.5VDC)	5		400				78

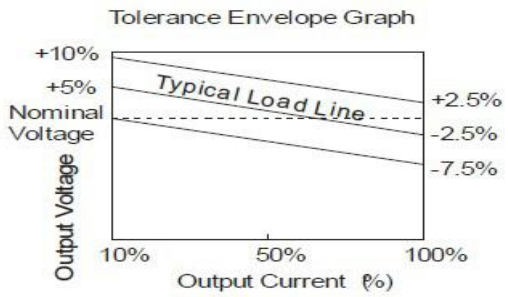
F1515S-2W		15		133				80
F2405S-2W	24V（21.6~26.4VDC）	5		400				80
F2409S-2W		9		222				82
F2412S-2W		12		167				83
F2415S-2W		15		133				85
F2424S-2W		24		83				85

□ Shows the nominal value of input voltage,due to space limitations ,the above list is only for some products,If other than a list of products, please contact the Company's sales department.

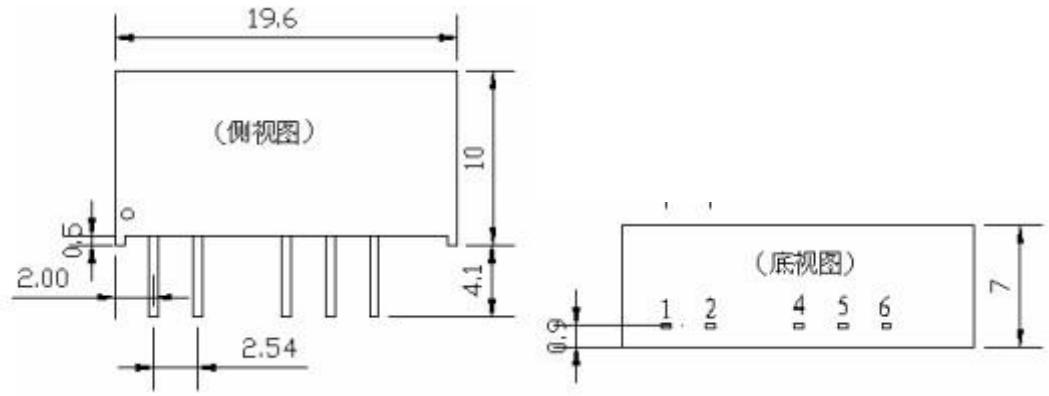
Mechanical Data

Packing Code	L x W x H ： mm	Packing No.
F_S-2W	19.5*7*10.0	

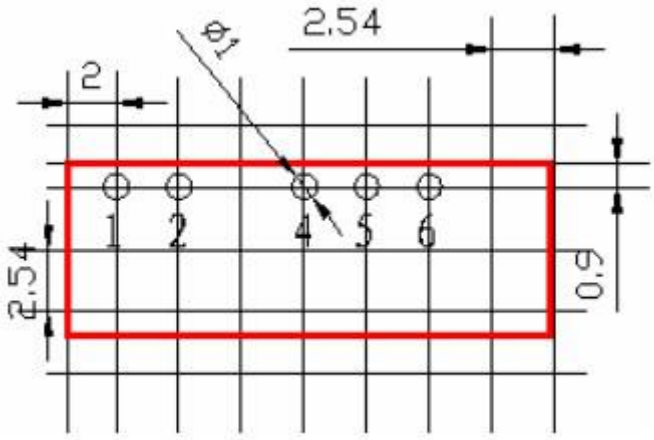
Typical Temperature Curve



Mechanical Dimension



LATERAL VIEW BOTTON VIEW



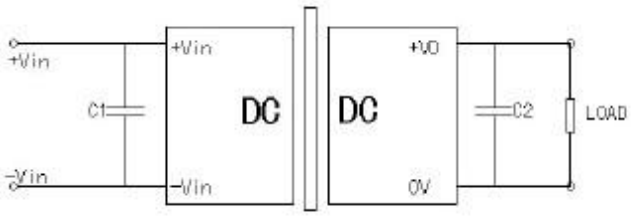
Recommended PCB Layout

UNIT:mm

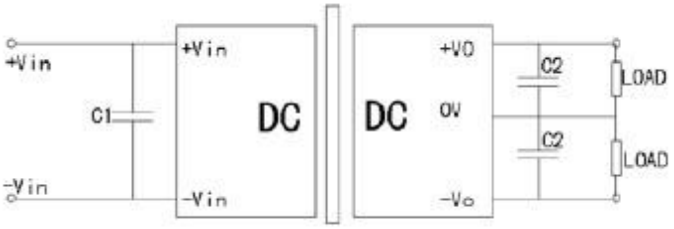
Pin Assignment

PIN	1	2	4	5	6			
Single output	Vin	GND	0V	NO PIN	+Vo			

Recommend Circuit



Single O/P



Dual O/P

C1、C2 select

INPUT VOLTAGE	C1	DUAL O/P VOLTAGE	C2	SINGLE O/P VOLTAGE	C2
5VDC	4.7uF	±5VDC	4.7uF	3.3VDC	10uF
12VDC	2.2uF	±9VDC	2.2uF	5VDC	10uF
24VDC	1uF	±12VDC	1uF	9VDC	4.7uF
---	---	±15VDC	1uF	12VDC	2.2uF

---	---	---	---	15/24VDC	1uF

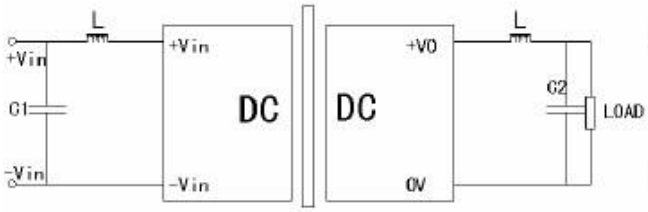
Application Note

(1)Pls don't use under no load: when the load power is less than 10% of the rated power ,we advise to connect the resistance following the output or the selection the smaller rated power module,for the resistance,the value is 5~10% of the rated power,resistance=U_2/（10%×2W）

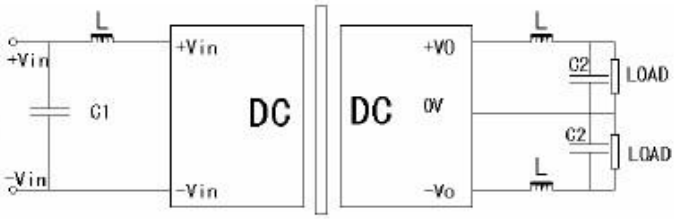
(2)Pls don't connect the excessive capacitor in external circut :output connects C2's value can't be too big,, otherwise easily lead to module startup flow or poor starting,

According to the external table to select the capacitance

(3)For the ripple&noise with higher requirements ,we advise to connect the LC filter, the frequency of LC filter is far smaller than the DC / DC module switching frequency, prevent mutual interference, resulting in increased the ripple damage the power module,pls see below



Single O/P



Dual O/P

*Note：The power modules such as the definition of the pin does not match with the hand book,please refer to the actual item.