# **IFS-2W Series**



### **Features**

- ★ Small Footprint
- ★ In-Out Isolation Voltage 3000 VDC
- **★** 7 PIN SIP Package
- **★** Temperature Range:-40°C to +85°C
- ★ UL94V-0 Inflaming retarding package
- **★** MTBF>1million hours(25°C)



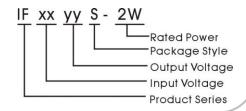
## **Applications**

The IF\_S-2W Series are designed for application where isolated output is required from a distributed power system.

These products apply to where:

- 1) 3000 VDC input and output isolation;
- 2) Input voltage variation ≤ ±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	range	Output	Output Current (mA)		Input Current Full load.(mA)		Efficiency	Max. Capacitive
	(nominal voltage)	Voltage	Min.	Max.	Max.	No.		Load(µF)
IF0505S-2W		5.0V	40	400	555		72%	
IF0509S-2W	4.75~5.25VDC	9.0V	22	222	547	40	73%	
IF0512S-2W	(5 VDC)	12.0V	16	167	541	40	74%	-
IF0515S-2W		15.0V	13	133	532		75%	
IF1205S-2W		5.0V	40	400	228		73%	
IF1209S-2W	11.4~12.6VDC	9.0V	22	222	219	32	76%	400uF
IF1212S-2W	(12 VDC)	12.0V	16	167	216	32	77%	400ur
IF1215S-2W		15.0V	13	133	213		78%	
IF2405S-2W		5.0V	40	400	111		75%	
IF2409S-2W	22.8~25.2VDC	9.0V	22	222	108	18	77%	
IF2412S-2W	(24 VDC)	12.0V	16	167	107	19	78%	
IF2415S-2W		15.0V	13	133	105		79%	

### **Common Specifications**

Item	Test Conditions	Min.	Тур.	Max.	Unit
Isolation Voltage	Tested for 1 minute and leakage current less than 1 mA	3000			VDC
Switching Frequency	Full load, nominal input		100		KHz
MTBF	MIL-HDBK-217F@25℃	1000			K hours
Isolation Resistance	Test at 500VDC	1000			MΩ
Isolation Capacitance			300		pF
Weight			2.5		g

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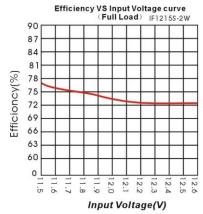
### **Output Specifications**

ltem	Test Conditions	Min.	Тур.	Max.	Unit	
Output Power		0.2		2	w	
Line Voltage Regulation	For Vin change of ±1%			±0.25		
Load regulation	10% to 100% load		0.01	0.02	%	
Output voltage accuracy	100% full load		0.01	0.02		
Ripple	20MHz Bandwidth		10		m\/n n	
Noise	ZUMITZ Balluwiutii		20		mVp-p	
Temperature Drift	100% full load			±0.03	%/°C	
Input Filter		C Filter	•			

### **Environmental Specifications**

Item	Test Conditions	Min.	Тур.	Max.	Unit
Storage Humidity	Non condensing			95	%
Temp. rise at full load			20	40	
Operating Temperature		-45		+85	°C
Storage Temperature	Power derating (above 85℃)	-55		+125	C
Soldering Temperature	1.5mm from case for 10 seconds			300	
Cooling		Free air convection			

### **Product typical Curve**



### Efficiency VS Output Voltage curve

(Vin=Vin-nominI) |F1215S-2W

87

84

81

78

84

81

78

69

66

63

60

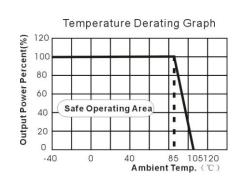
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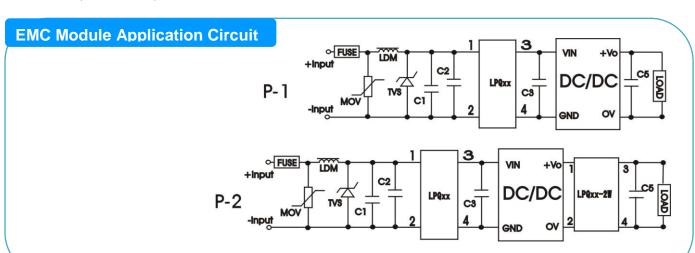
Input Voltage (V)

### Mechanical Dimensions & Recommended Footprint

### 0.50mm 19.6 HOPOWER GYYMM 10.00 (Side view) IFxxyyS-2W Note: Grid 2.54\*2.54mm. Unit: mm General tolerances: 0.20mm 25 7.00 Package Vin GND OV +Vo 15.24 **IFS** 5 (Bottom view)

### **Temperature Derating Graph**





# IFS-2W Series EMC Recommended Circuit FUSE HOPOWER C1 C2 C3 C5 GND OV GND OV FUSE LIDM L