

15Watt, Single & Dual Output ,AC/DC Power Module Converter

FEATURES:

Universal Input 90~264VAC

High Efficiency Up To 85%

Protection: Short Circuit /Overload/Over Voltage

Fully Encapsulated Plastic Case

Internal Input Filter

ROHS Compliant

AS15220 - H SD - XX
1 2 3 4

1:Series

2:Package

3:Single(S) Dual(D)

4:Output Voltage

Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified					
Part Number	Output Wattage	Output Voltage	Output Current	Ripple & Noise	Efficiency
	(W)	(VDC)	(mA)	(mV) max(Note)	(TYP %)
AS15220-HS03	13.0	3.3	4000	100	72
AS15220-HS05	15.0	5	3000	100	78
AS15220-HS12	18.0	12	1500	100	82
AS15220-HS15	18.0	15	1200	150	82
AS15220-HS24	19.0	24	800	150	83
AS15220-HS48	19.0	48	400	240	85
AS15220-HD05	15.0	±5	±1500	100	75
AS15220-HD12	15.0	±12	±625	150	79
AS15220-HD15	15.0	±15	±500	150	80
AS15220-HD24	15.0	±24	±320	150	80
AS15220-HD0512	14.8	Vo1=+5,Vo2=+12	Io1=2000,Io2=400	100(Vo1) 150(Vo2)	74
AS15220-HD0515	14.5	Vo1=+5,Vo2=+15	Io1=2000,Io2=300		74
AS15220-HD0524	14.8	Vo1=+5,Vo2=+24	Io1=2000,Io2=200		76

Input Specifications						
Parameters	Conditions		Min	Typ	Max	Units
Rated Input Voltage	Vo,lo nom			100~240		Vac
Voltage Range	Vo,lo nom	AC in	90		264	Vac
		DC in	120		370	Vdc
Line frequency	Vi nom,Io nom		47	50/60	63	Hz
Inrush Current	Io nom	Vi:115VAC			10	A
		Vi:230VAC			20	A
Input Fuse	VDE/UL/CCC FUSE 2.5A/250V (Slow blow)					

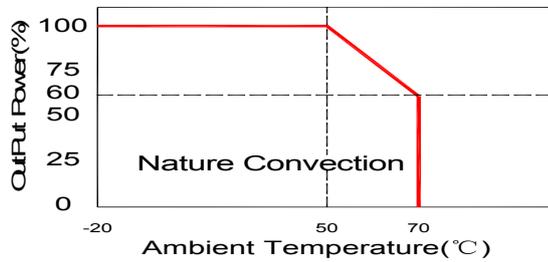
Output Specifications						
Parameters	Conditions		Min	Typ	Max	Units
Output Voltage Accuracy	Vi nom,Io nom (Single output)	3.3V,5V Models			±3	%
		12....48V Models			±2	%
	Dual Output				±5	%
Minimum Load	Vi nom	Single Output Models	0			%
		Dual Output Models(each output)	20			%
Line Regulation	Io nom,Vi min...Vi max			±1		%
Load Regulation	Io min~ Io nom	Single Output Models		±2		%
		Dual Output Models		±5		%
Transient Recovery time	Vi nom,Io nom = ↔→0.5 Io nom			1,000		µS
Protection	Overload		Above 110% rated output power Protection type: Recovers automatically after fault condition is removed			
	Short circuit		Recovers automatically after fault condition is removed			
	Over Voltage(Main Output)		120%-150% rated output Voltage Protection type: Zener diode clamp			

Note. Ripple & noise is measured by using 20 MHz bandwidth, measured with a 47µf paralleled with a high-frequency 0.47µf capacitor across each output by full load.

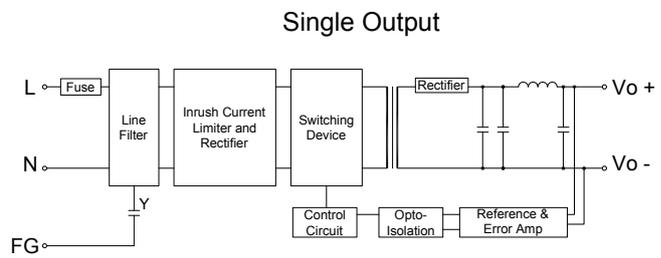
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General Specifications					
Parameters	Conditions	Min	Typ	Max	Units
Switching Frequency	Vi nom, Io nom		65		KHz
Isolation Voltage	Input / Output	3KVac/ 5mA/5Secs			
Isolation Resistance	Input / Output, @500 Vdc	100			MΩ
Operating Temperature	Operating at Vi nom, Io nom	-20		+70	°C
Derating	Vi nom, Io nom +51 to 71 °C			2	%/°C
Storage Temperature	Non Operational	-40		+85	°C
Relative Humidity	Vi nom, Io nom			95	% RH
Safety Standards	EN60950-1 approved				
EMI Conduction & Radiation	Compliance to EN55022				
EMS Immunity	Compliance to EN55024				
Dimension	L69.85x W48.01 x H23.37mm L2.75x W1.89 x H0.92 inches				
Cooling	Free air convection				

Temperature Derating Graph

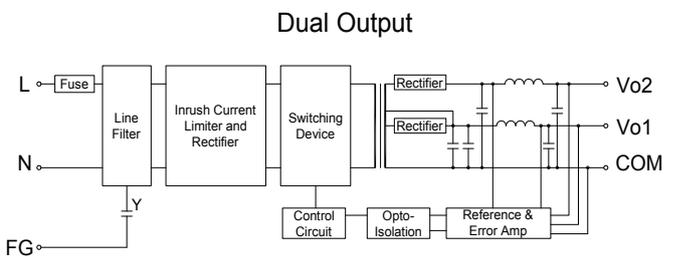


Circuit Schematic(1)

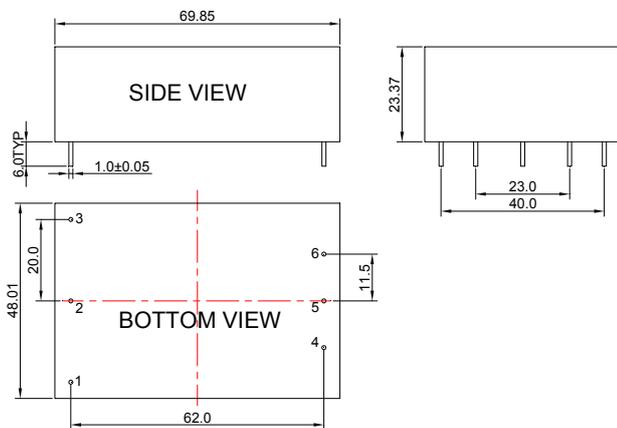


Circuit Schematic(2)

Circuit Schematic(3)



Markings and dimensions



PIN	Model		
	Single	Dual	Dual
1	FG	FG	FG
2	ACN	ACN	ACN
3	ACL	ACL	ACL
4	-Vo	-Vo	+Vo2
5	NO PIN	Com	Com
6	+Vo	+Vo	+Vo1

Unit: mm Unless otherwise specified, all tolerances are ±0.50