

## KEY FEATURES

- Low Standby <0.1W
- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-264VAC, 47-440 Hz
- Regulated Output and Low Ripple and Low Noise
- Isolation Class II
- CE, CB and UL Approval
- 3-Year Product Warranty



LD25W SERIES



## ELECTRICAL SPECIFICATIONS

All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

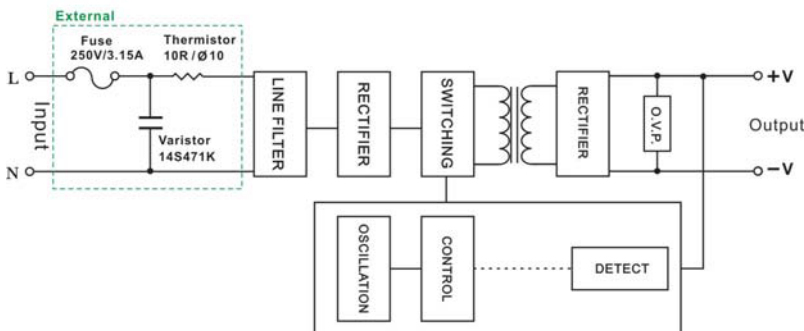
Model No.	No.	FSP025LWVS5V1P	FSP025LWVS012P	FSP025LWVS015P	FSP025LWVS024P
Max Output Wattage (W)		20W	25W	25W	25W
Input	Voltage	90-264 VAC or 120-370 VDC			
	Frequency (Hz)	47-440 Hz			
	Current (Full load)	490 mA max. (115 VAC) / 320 mA max. (230 VAC)			
	Inrush Current (<2ms,Cold Start)	30 A max. (115 VAC) / 60 A max. (230 VAC)			
	Leakage Current	0.25 mA max. (230 VAC)			
	External Fuse (mandatory)	3.15 A slow blow type			
	External Varistor (recommended)	14S471K			
	External Thermistor (recommended)	10R / 10φ			
Output	Voltage (V.DC.)	5.1V	12V	15V	24V
	Voltage Accuracy	±2%			
	Current (mA) max	3922	2083	1666	1042
	Maximum Capacitive Load	2000uF	680uF	220uF	220uF
	Minimum Load	0%			
	Line Regulation (LL-HL) (typ.)	±1%			
	Load Regulation (5-100%) (typ.)	±3%	±1%		
	Ripple & Noise	120mV max (Vp-p)	150mV max (Vp-p)	160mV max (Vp-p)	240mV max (Vp-p)
	Efficiency (at 230 VAC)	82%	86%	85%	86%
	Hold-up Time(typ)	36 ms (at 230VAC)			
Protection	Over Power Protection	Hiccup technique, auto-recovery			
	Over Voltage Protection	Zener diode clamp			
	Short Circuit Protection	Hiccup mode, indefinite (automatic recovery)			
Isolation	Input-Output (V.AC)	3000V			
Environment	Operating Temperature	-40°C...+70°C (with derating)			
	Storage Temperature	-40°C...+85°C			
	Temperature Coefficient	±0.05%/°C			
	Humidity	95% RH			
	MTBF	>400,000 h @ 25°C (MIL-HDBK-217F)			
Physical	Dimension (L x W x H)	2.07 x 1.08 x 0.93 Inches ( 52.5 x 27.5 x 23.5 mm ) Tolerance ± 0.5 mm			
	Case Material	Plastic resin (flammability to UL 94V-0)			
	Weight	62 g			
	Cooling Method	Free air convection			
Safety	Agency Approvals	UL/cUL 60950-1&IEC/EN60950-1, TUV IEC/EN60335-1,CE			
EMC	EMI (Conducted & Radiated Emission)	EN 55032 class B			
	EMS (Noise Immunity)	EN 55024			

## NOTE

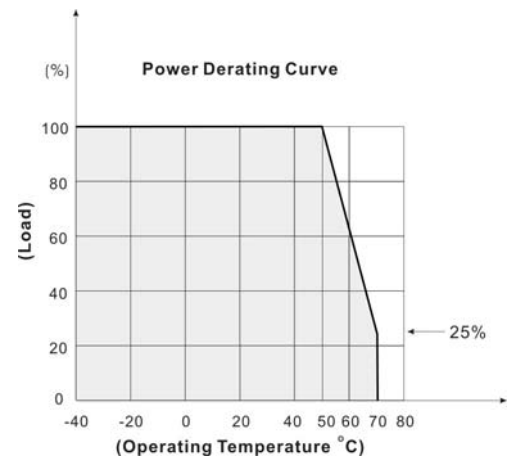
1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. It's recommended Varistor 14S471K at L / N input side in parallel.
3. It's necessary Fuse 250V/3.15A at L input side in series connection.
4. It's recommended 10R / 10φ thermistor at L input side in series connection.

## BLOCK DIAGRAM

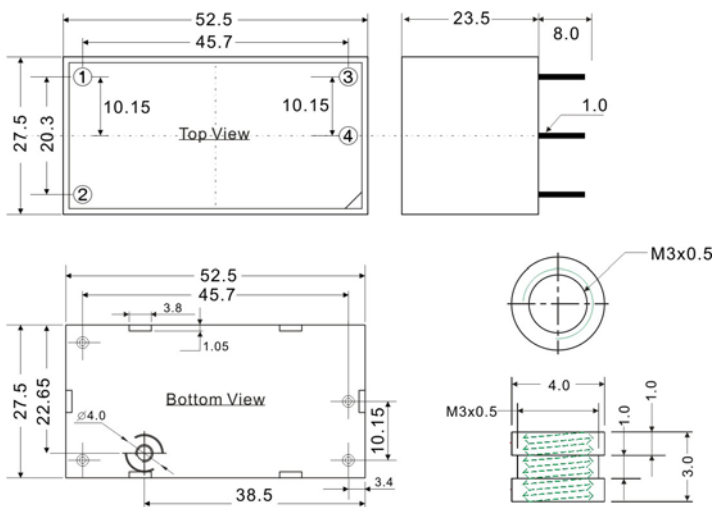
Single Output



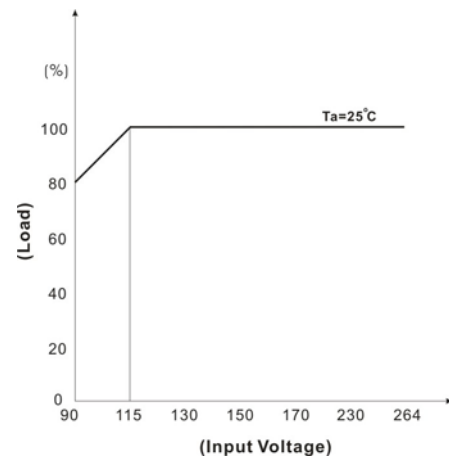
## DERATING



## MECHANICAL DIMENSION ( Top View )



Maximum Torque 12 { 1.2 1 } ( k g f . c m { N . m } )



PIN#	Single
1	AC IN (L)
2	AC IN (N)
3	+DC OUT
4	-DC OUT