

## ASH-25 Series, 25Watt

### FEATURES:

- ✓ Universal AC input/full range
- ✓ Low ripple and noise
- ✓ Short circuit, over current, over voltage protections
- ✓ High efficiency, high density
- ✓ 100% burn-in test
- ✓ 3 year warranty



Model	Input voltage (Vac)	Output Voltage (Vdc)	Output Current (mA)	Output power (W)
ASH25-5	85~265	5	4100	25
ASH25-9		9	2500	25
ASH25-12		12	2100	25
ASH25-15		15	1600	25
ASH25-24		24	1100	25
ASH25-48		48	500	25

Note: Other output models may available on request.

### ELECTRICAL

Parameters	Symbols	Test Conditions / Comment	Input			Units
			Min.	Typ.	Max.	
Input voltage	$V_{in}$	--	85	--	265	Vac
			120	--	370	Vdc
Input frequency	$F_{line}$	--	47	--	63	Hz
Leakage current	$I_{leakage}$	$V_{in} = 230Vac/50Hz$	--	--	0.3	mA
Input current	$I_{in}$	Full load, $V_{in} = 115Vac$	--	600	--	mA
		Full load, $V_{in} = 230Vac$	--	340	--	mA
Inrush current	$I_{inrush}$	Cold start, full load, $V_{in} = 115Vac$	--	16	--	A
		Cold start, full load, $V_{in} = 230Vac$	--	30	--	A

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### ELECTRICAL

#### Output

Parameters	Symbols	Test Conditions / Comment	Min.	Typ.	Max.	Units
Output voltage accuracy	--	--	--	±2.0	--	%
Line regulation	$V_{out-line}$	--	--	±2.0	--	%
Load regulation	$V_{out-load}$	10%~100% load	--	±1.5	--	%
Efficiency	$\eta$	--	--	70	--	%
Ripple	$V_{ripple}$	20MHz	--	50	100	mVp-p

#### Protection

Short circuit	Hiccup mode, it will auto-recover after fault condition is removed					
Over current	≥110% $I_o$ , it will auto-recover after fault condition is removed					
Over voltage	Diode clamp					

#### Environment

Storage	$T_{storage}$	Humidity: 10% RH to 95% RH	-25	--	+105	°C
Ambient operating temperature	$T_a$	Startup at rated voltage(please refer to derating curve)	-25	--	+70	°C
Operating relative humidity	$H_a$	Non condensing	10	--	95	%
Temperature coefficient	--	--	--	0.02	--	%/ °C
MTBF	$T_{MTBF}$	MIL-HDBK-217F(25°C)	300	--	--	kHrs
Dimension(LxWxH)	70.0 x 48.0 x 23.5mm					

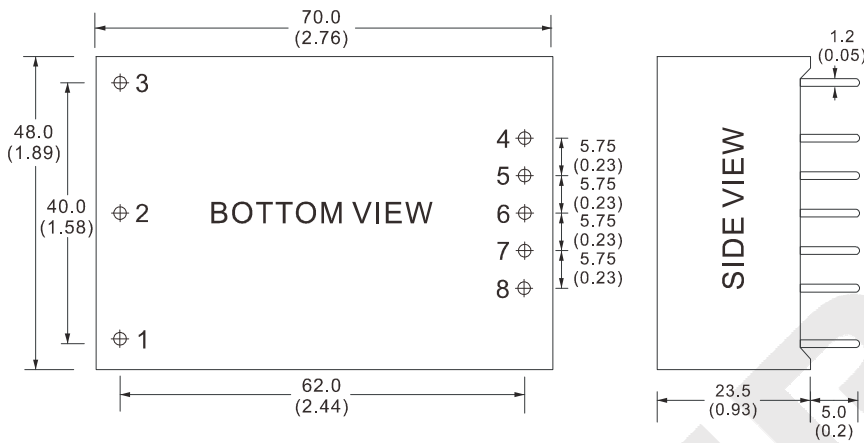
#### Safety / EMC

Safety standards	Design refer to UL1012, UL60950, UL60950					
Isolation voltage	I/P-O/P:3.0KVAC					
EMC	EN55022 Class B, EN55024					

**Notes: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25°C and  $V_{in}$  = 85Vac to 265Vac.**

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### MECHANICAL



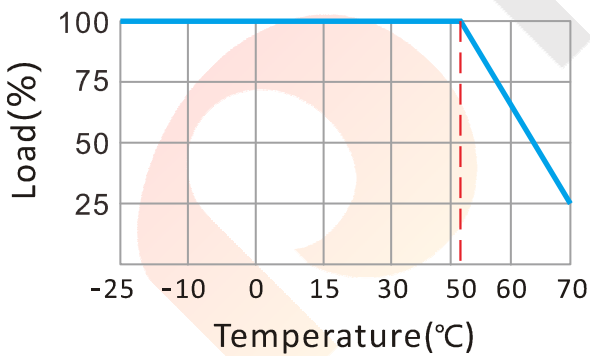
#### PIN DEFINITION

Pin	SINGLE
1	FG
2	AC(N)
3	AC(L)
4	+Vo
5	No Pin
6	No Pin
7	No Pin
8	-Vo

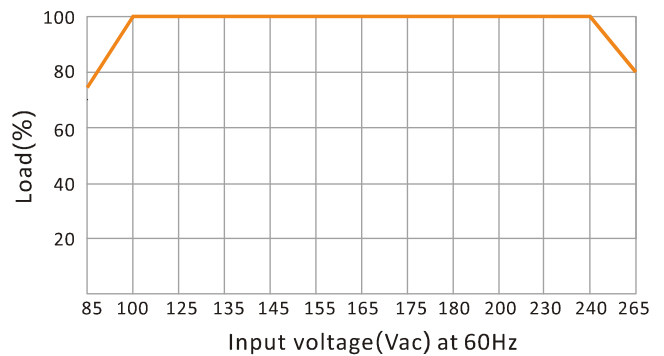
Unit: mm

### ELECTRICAL CURVE

#### DERATING CURVE



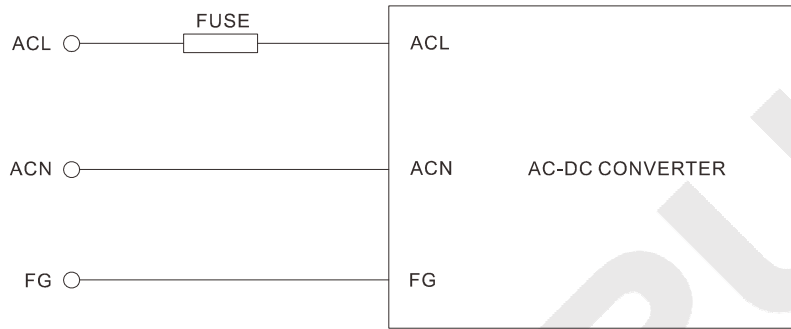
#### STATIC CHARACTERISTIC CURVE



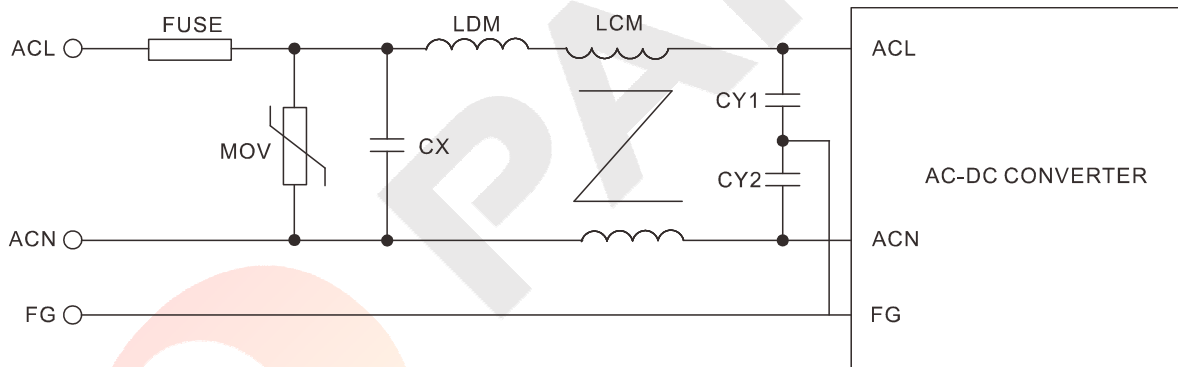
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NOTE

RECOMMENDED TEST AND APPLICATION CIRCUIT



RECOMMENDED EMC TEST CIRCUIT



**Component**                      **Recommended Value**

FUSE                                  1A/250V, Slow rating

MOV                                    14D-561K

CY1, CY2                            1000pF/400Vac

CX                                      0.1uF/275Vac

LCM                                    10mH

LDM                                    4.7uH/2a