

AQR-5 Series, 5Watt
FEATURES:

- ✓ Universal AC input range
- ✓ Short circuit, and over current protections
- ✓ Board in-line type installation
- ✓ High voltage isolation
- ✓ Compact size
- ✓ Plastic case



Model	Input voltage (Vac)	Output voltage (Vdc)	Output current (mA)	Output power (W)
AQR5-3	85-264	3.3	1250	5
AQR5-5		5	1000	5
AQR5-9		9	550	5
AQR5-12		12	416	5
AQR5-15		15	334	5
AQR5-24		24	208	5
AQR5-D5		±5	±500	5
AQR5-D9		±9	±275	5
AQR5-D12		±12	±210	5
AQR5-D24		±24	±100	5

Note : Above models are default to plastic case.

ELECTRICAL

Input						
Parameters	Symbols	Test Conditions / Comment	Min.	Typ.	Max.	Units
Input voltage	V_{in}	--	85	--	264	Vac
Input frequency	F_{line}	--	47	--	63	Hz
Efficiency	η	Full voltage, full load	--	78	--	%
Output						
Output voltage accuracy	--	$V_{in}=100-240Vac$	--	1	--	%
Line regulation	$V_{out-line}$	V_{in} from 100Vac to 240Vac	--	0.2	--	%
Load regulation	$V_{out-load}$	20%-100% load	--	0.5	--	%

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Turn-on delay time	T_{on_delay}	--	1	--	S
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ELECTRICAL
Output

Parameters	Symbols	Test Conditions / Comment	Min.	Typ.	Max.	Units
Ripple	V_{ripple}	--	--	120	--	mV

Protection

Over current Continuous auto-recovery

Short circuit Continuous auto-recovery

Environment

Storage	$T_{storage}$	Humidity: 5% RH to 95% RH	-40	--	+105	°C
Ambient operating temperature	T_a	--	-25	--	+65	°C
Case temperature	T_c	--	--	--	+90	°C
Operating relative humidity	H_a	Non condensing	10	--	90	%
MTBF	T_{MTBF}	--	--	--	200	kHrs

Dimension(LxWxH) 39x25x22mm

Weight 32g

Safety

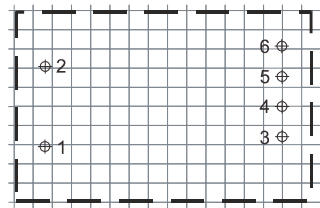
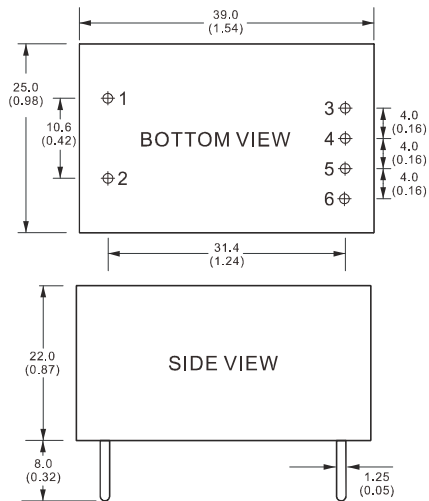
Isolation Voltage Input-Output: 2500Vac \leq 1.5mA//1min

Input-Case: 1500Vac \leq 1.5mA//1min

Notes: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25°C and V_{in} = 100Vac to 240Vac.

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MECHANICAL



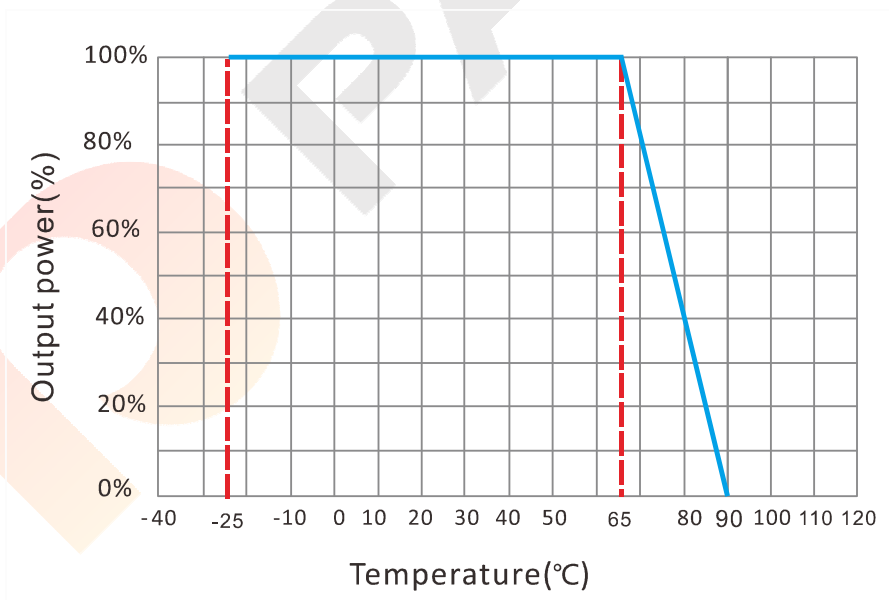
Unit : mm(inch)
PCB vertical view
Grid spacing: 2.54mm(0.1inch)

CONNECTION

PIN #	SINGLE	DUAL
1	AC(N)	AC(N)
2	AC(L)	AC(L)
3	+Vo	+Vo1
4	No Pin	COM
5	GND	-Vo2
6	No Pin	No Pin

Note: Unit is mm(inch).

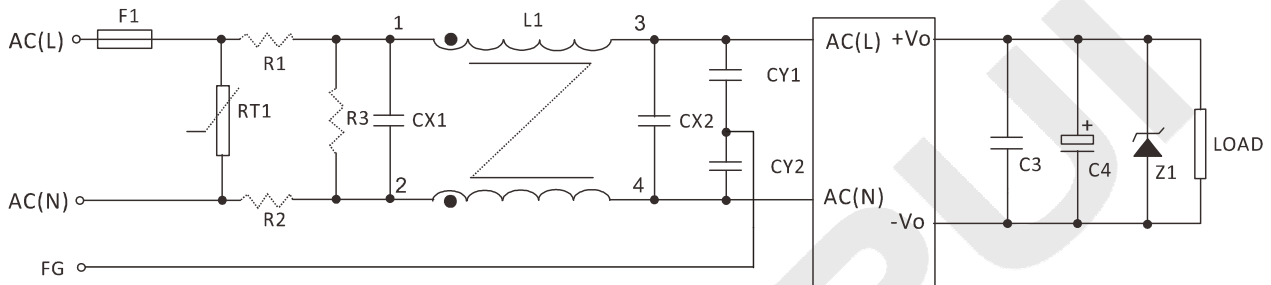
ELECTRICAL CURVE



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NOTE

RECOMMENDED TEST AND APPLICATION CIRCUIT



EMC RECOMMENDED APPLICATION CIRCUIT

	5VDC	9VDC	12VDC	24VDC
F1		T1A/250V		
RT1		7D471K		
R1, R2		2Ω/3W		
R3		1MΩ/2W		
L1		L=3-10mH, I=0.2-0.5A		
CX1, CX2		0.15-1μF/300Vac		
CY1, CY2		102K/400Vac		
C3		1μF/50V		
C4	220uF/16V	100uF/25V	100uF/25V	47uF/35V
Z1	P6KE6.8A	P6KE16A	P6KE16A	P6KE33A