

ATD-1 Series, 1Watt
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)
ATD1-5		5	200	1
ATD1-12	85-265	12	83	1
ATD1-24		24	42	1

Notes: Other output models may available on request.

ELECTRICAL

Parameters	Symbols	Test Conditions / Comment	Input			Units
			Min.	Typ.	Max.	
Input voltage	V_{in}	--	85	220	265	Vac
			120	310	380	Vdc
Input frequency	F_{line}	--	47	50	63	Hz
Input current	--	Vin=115Vac		0.06		A
		Vin=220Vac		0.05		A
Inrush current	--	Vin=115Vac		10		A
		Vin=220Vac		20		A
Leakage current	--	Vin=230Vac, 50Hz		0.5		mA
Efficiency	η	Full voltage, full load	--	73	--	%
External fuse recommend						1A-2A/250VAC slow break

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Output

Parameters	Symbols	Test Conditions / Comment	Min.	Typ.	Max.	Units
Output voltage accuracy	--	V _{in} =220Vac	--	±0.2	--	%
Line regulation	V _{out-line}	V _{in} from 100Vac to 240Vac	--	±0.5	--	%
Load regulation	V _{out-load}	20%-100% load	--	±0.2	--	%
No load power consumption	--	--	--	0.3	--	W
Ripple	V _{ripple}	--	--	--	80	mV
Turn-on delay time	--	--	--	50	--	ms

Protection

Over current	≥150%I _o , continuous automatic recovery					
Over voltage	≤7.5Vdc					
Short circuit	Continuous Automatic Recovery					

Environment

Storage	T _{storage}	Humidity: 5% RH to 95% RH	-40	--	+85	°C
Ambient operating temperature	T _a	--	-40	--	+75	°C
Operating relative humidity	H _a	Non condensing	10	--	90	%
MTBF	T _{MTBF}	--	--	--	200	kHrs

Dimension(LxWxH) 37.5x18.5x13.5mm

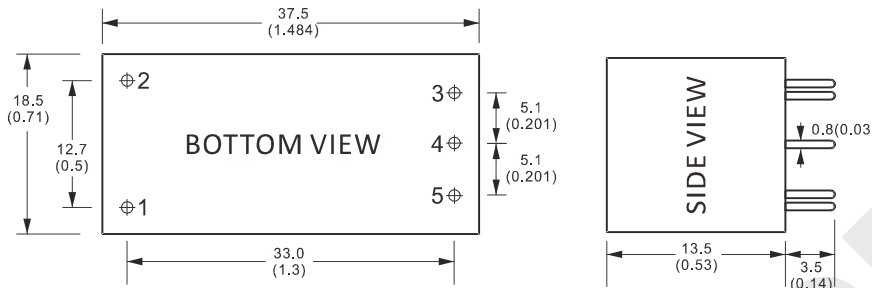
Safety

Isolation Voltage	Input-Output: 3000Vac≤1.5mA//1min
Isolation resistance	Input-Output: 100MΩ@500Vdc

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

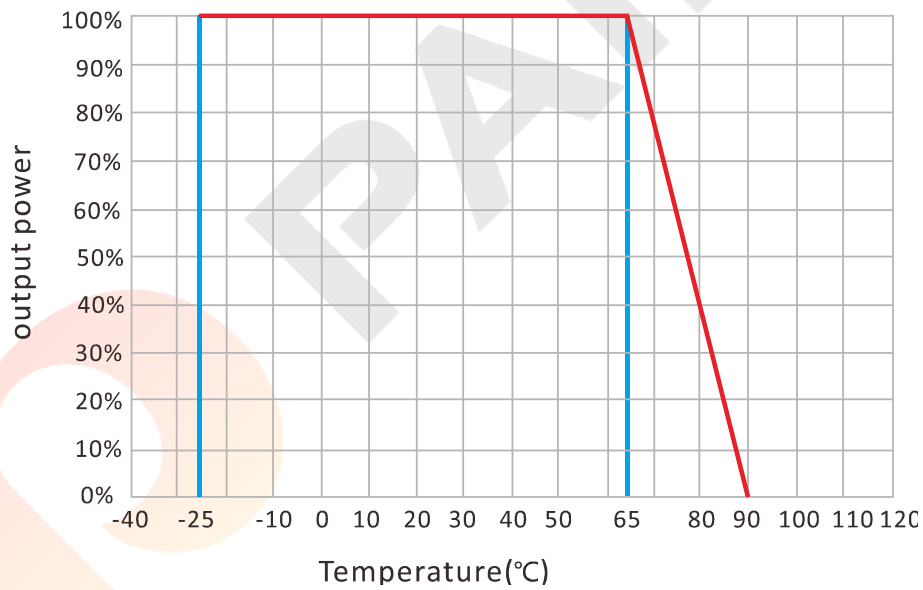


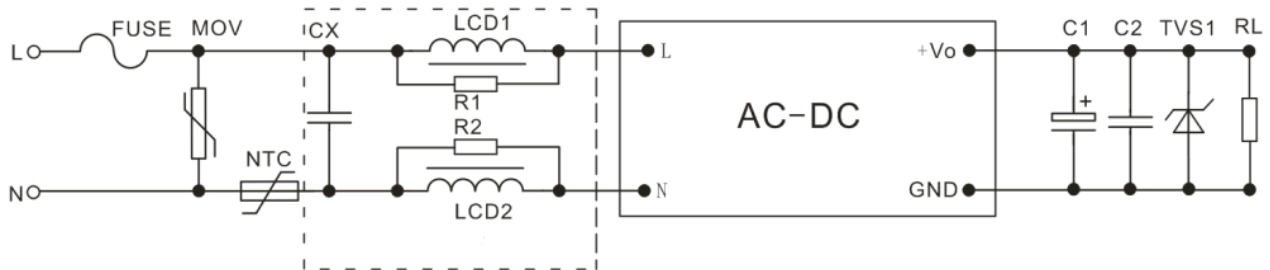
CONNECTION

PIN #	SINGLE
1	AC(N)
2	AC(L)
3	+Vo
4	No Pin
5	-Vo

Note: Unit is mm(inch).

ELECTRICAL CURVE



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NOTE
RECOMMENDED TEST AND APPLICATION CIRCUIT

EMC RECOMMENDED APPLICATION CIRCUIT

MOV	10D511K
TVS	SMBJ7.0A
C1	330 μ F/10V
CX	0.1 μ F/275Vac
FUSE	1A/250V, slow break, external connect
R1, R2	2K Ω , above 1/8W