

ATD-6 Series, 6Watt
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)	Efficiency (%)
ATD6-5	85-305	5	1200	6	76
ATD6-9		9	666	6	81
ATD6-12		12	500	6	81
ATD6-15		15	400	6	81
ATD6-24		24	250	6	83

Notes: Other output models may available on request.

ELECTRICAL
Input

Parameters	Symbols	Test Conditions / Comment	Min.	Typ.	Max.	Units
Input voltage	V_{in}	--	85	220	305	Vac
			120	310	430	Vdc
Input frequency	F_{line}	--	47	50	63	Hz
Input current	--	$V_{in}=115Vac$		0.2		A
		$V_{in}=220Vac$		0.16		A
Inrush current	--	$V_{in}=115Vac$		10		A
		$V_{in}=220Vac$		20		A
Leakage current	--	$V_{in}=230Vac, 50Hz$		0.5		mA
Efficiency	η	Full voltage, full load	75	--	83	%
External fuse recommend						2A/400VAC slow break

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ELECTRICAL
Output

Parameters	Symbols	Test Conditions / Comment	Min.	Typ.	Max.	Units
Output voltage accuracy	--	Full input voltage range	--	--	±2.0	%
Line regulation	$V_{out-line}$	V_{in} from 100Vac to 240Vac	--	--	±0.5	%
Load regulation	$V_{out-load}$	20%-100% load	--	--	±1.0	%
Ripple	V_{ripple}	--	80	--	120	mV
Turn-on delay time	--	--	--	100	--	ms

Protection

Over current	≥150%Io, continuous automatic recovery					
Short circuit	Continuous automatic recovery					

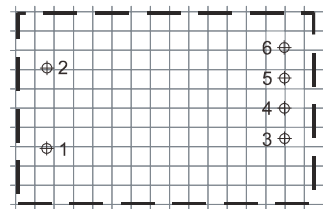
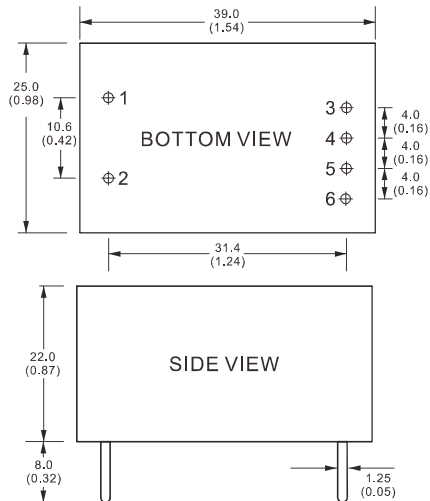
Environment

Storage	$T_{storage}$	Humidity: 5% RH to 95% RH	-40	--	+105	°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)	39.0x25.0x22.0mm					

Safety

Isolation Voltage	Input-Output: 3750Vac≤3mA//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.

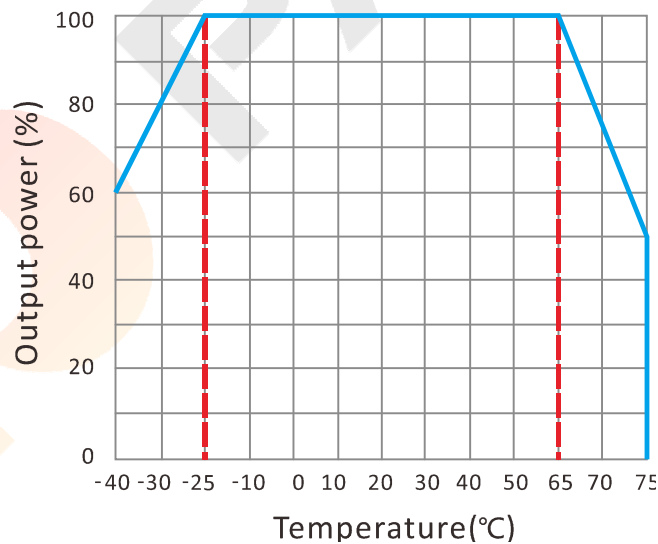
ATD-6 Series, 6Watt
MECHANICAL


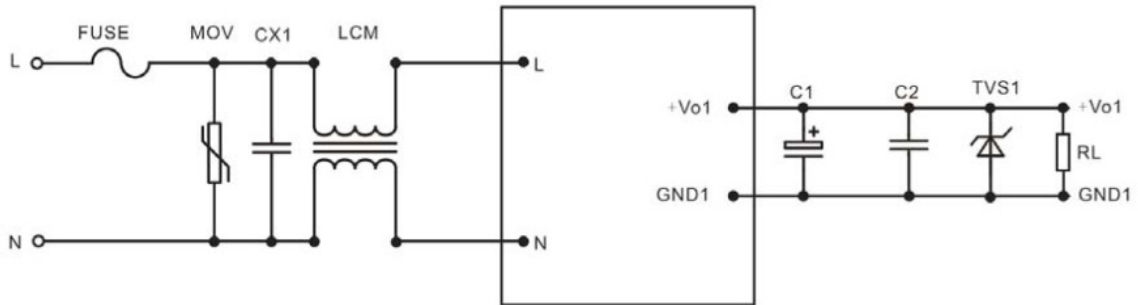
Unit: mm(inch)
PCB vertical view
Grid spacing: 2.54mm(0.1inch)

CONNECTION

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

Note: Unit is mm(inch).

ELECTRICAL CURVE


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NOTE
RECOMMENDED TEST AND APPLICATION CIRCUIT

EMC RECOMMENDED APPLICATION CIRCUIT

	5V	9V	12V	15V	24V
MOV			14D561K		
TVS1	SMBJ7.0A	SMBJ12.0A	SMBJ20A	SMBJ20.0A	SMBJ30.0A
CX1			0.1 μ F/275Vac		
FUSE			2A~400Vac, slow break		
LCM			Common mode choke, 30mH		