

ATD-3 Series, 3Watt

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)
ATD3-5	85-265	5	600	3

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	265	Vac
			120	310	380	Vdc
Input frequency	F_{line}	--	47	50	63	Hz
Input current	--	$V_{in}=115V_{ac}$		0.06		A
		$V_{in}=220V_{ac}$		0.05		A
Inrush current	--	$V_{in}=115V_{ac}$		10		A
		$V_{in}=220V_{ac}$		20		A
Leakage current	--	$V_{in}=230V_{ac}, 50Hz$		0.5		mA
Efficiency	η	Full voltage, full load	--	73	--	%
External fuse recommend						1A-2A/250VAC slow break
Output						
Output voltage accuracy	--	$V_{in}=220V_{ac}$	--	± 0.2	--	%
Line regulation	$V_{out-line}$	V_{in} from 100Vac to 240Vac	--	± 0.5	--	%

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Output

Parameters	Symbols	Test Conditions / Comment	Min.	Typ.	Max.	Units
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	$\geq 150\%I_o$, continuous automatic recovery					
Over voltage	$\leq 7.5V_{dc}$					
Short circuit	Continuous Automatic Recovery					

Environment

Storage	$T_{storage}$	Humidity: 5% RH to 95% RH	-40	--	+85	$^{\circ}C$
Ambient operating temperature	T_a	--	-40	--	+75	$^{\circ}C$
Operating relative humidity	H_a	Non condensing	10	--	90	%
MTBF	T_{MTBF}	--	--	--	200	kHrs
Dimension(LxWxH)	37.5x18.5x13.5mm					

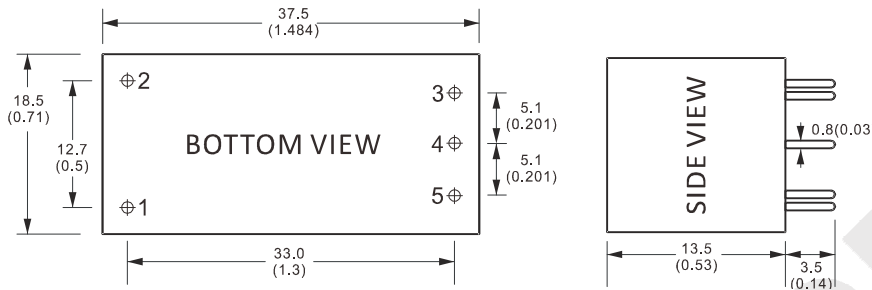
Safety

Isolation Voltage	Input-Output: $3000V_{ac} \leq 1.5mA // 1min$					
Isolation resistance	Input-Output: $100M\Omega @ 500V_{dc}$					

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

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MECHANICAL

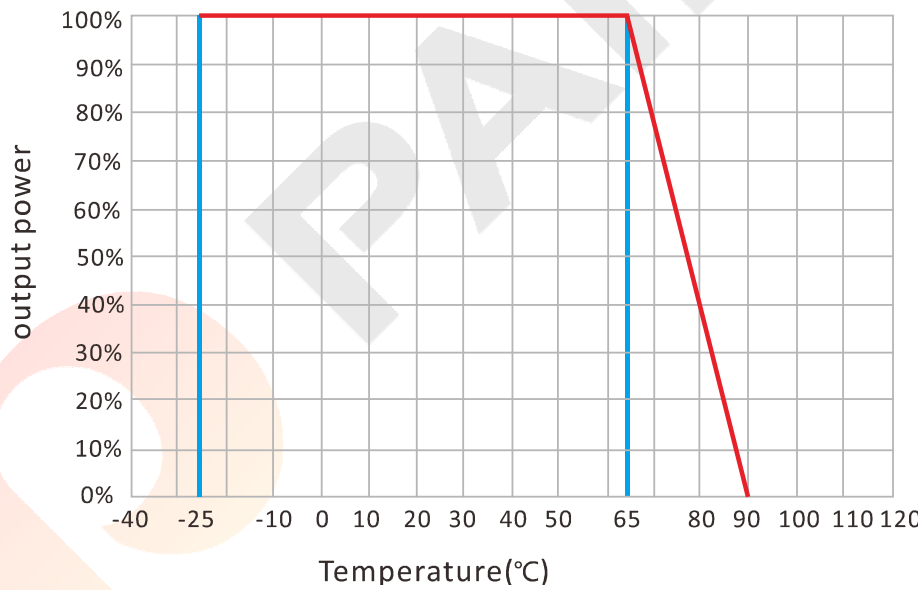


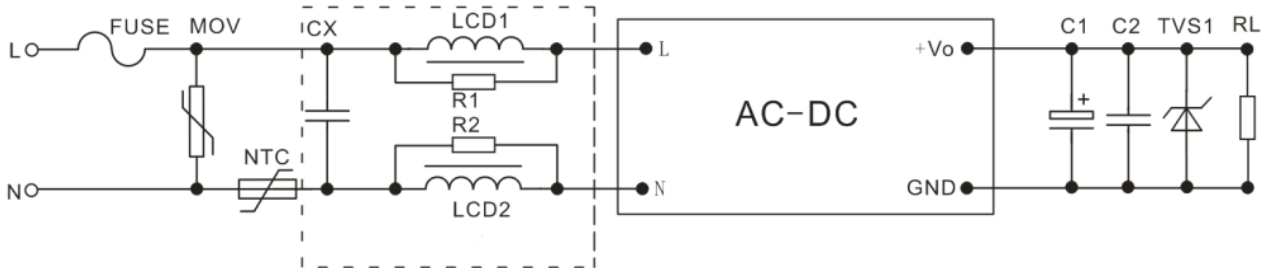
CONNECTION

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