

ATD-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)	Efficiency (%)
ATD5-5	85-265	5	1000	5	75
ATD5-12		12	416	5	80
ATD5-24		24	208	5	82
ATD5-48		48	104	5	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	265	Vac
			120	310	380	Vdc
Input frequency	F_{line}	--	47	50	63	Hz
Input current	--	Vin=115Vac		0.2		A
		Vin=220Vac		0.16		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	75	--	83	%
External fuse recommend						1A-3A/250VAC slow break

ATD-5 Series, 5Watt
ELECTRICAL
Output

Parameters	Symbols	Test Conditions / Comment	Min.	Typ.	Max.	Units
Output voltage accuracy	--	Full input voltage range	--	±1.0	±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	%
No load power consumption	--	--	--	--	0.1	W
Ripple	V_{ripple}	--	--	--	80	mV
Turn-on delay time	--	--	--	100	--	ms

Protection

Over current	≥150% I_o , continuous automatic recovery
Over voltage	Yes
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}	--	300	--	--	kHrs

Dimension(LxWxH) 48.5x36.0x20.5mm

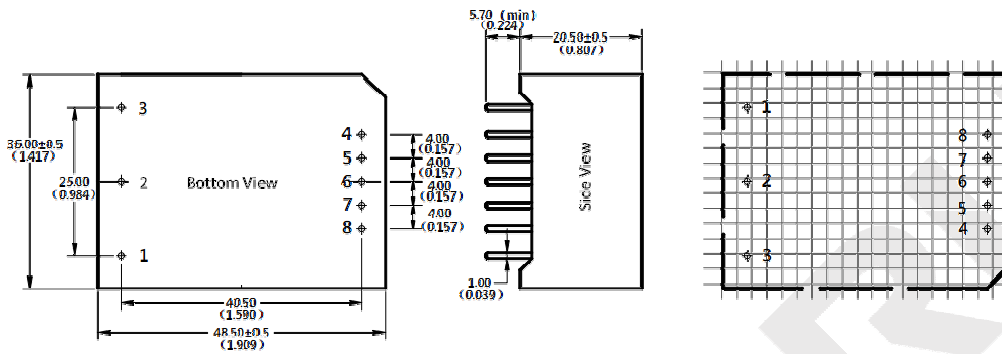
Safety

Isolation Voltage	Input-Output: 4000Vac≤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.

ATD-5 Series, 5Watt

MECHANICAL

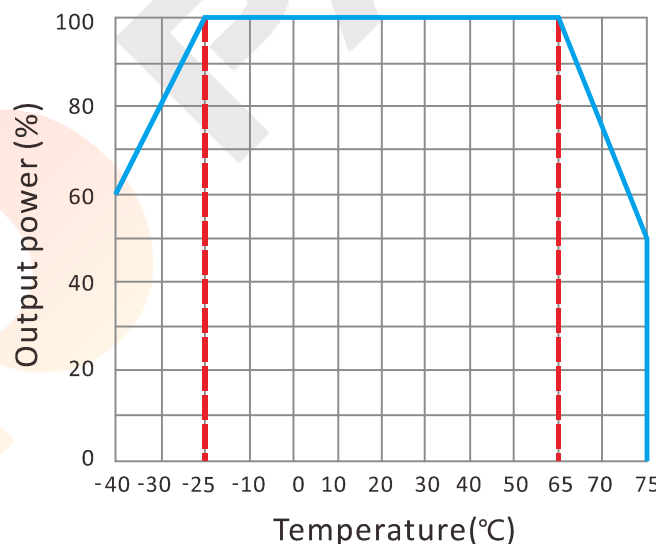


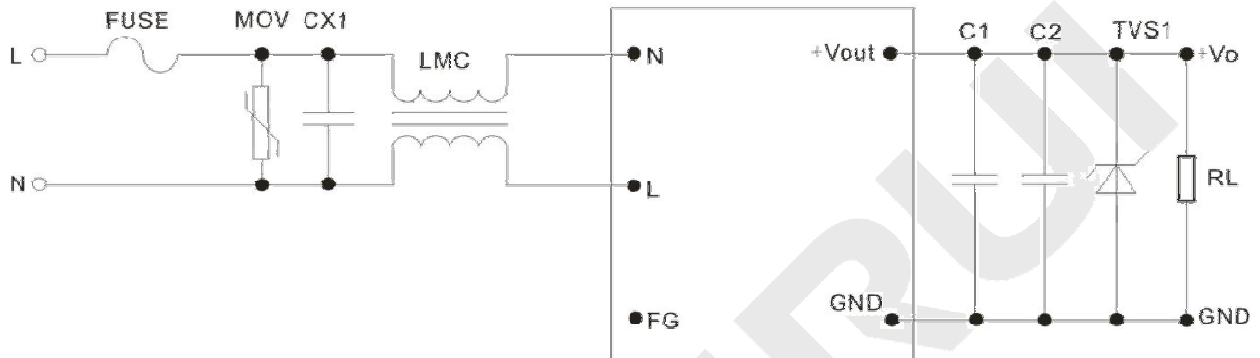
CONNECTION

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

Note: Unit is mm(inch).

ELECTRICAL CURVE



ATD-5 Series, 5Watt
NOTE
RECOMMENDED TEST AND APPLICATION CIRCUIT

EMC RECOMMENDED APPLICATION CIRCUIT

	5V	12V	24V	48V
MOV		10D511K		
TVS1	SMBJ7.0A	SMBJ20A	SMBJ30.0A	SMBJ64A
CX1		0.1 μ F/275Vac		
FUSE		2A~250Vac, slow break		
LCM		Common mode choke, 30mH		