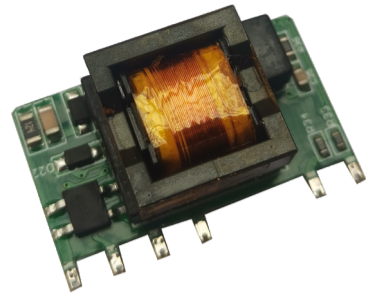


Features

- Efficiency up to 82%
- 3000VAC Isolation
- Single output
- short circuit protection
- Universal Input :85 ~ 264VAC,47~63Hz
- Wide temperature -40°C to 70°C
- Power modules for PCB mounting design
- SIP



Model Selection Guide

Order Code	Input		Output		Recommend capacitive(uF)	Efficiency(%) (Typ)
	AC(V)	DC(V)	Vo(V)	Io(mA)		
AS10-S03R3 *	85-305	120-400	3.3	1000	2200	70
AS10-S05R3			5	2000	1500	75
AS10-S09R3			9	1111	1000	76
AS10-S12R3			12	833	1000	78
AS10-S15R3			15	667	680	81
AS10-S24R3			24	417	680	82

Input Characteristics

Parameter	Condition	Min	Typ	Max	Units
Input Voltage Range	AC	85	--	305	VAC
	DC	120	--	400	VDC
Input Frequency	AC	47	--	63	Hz

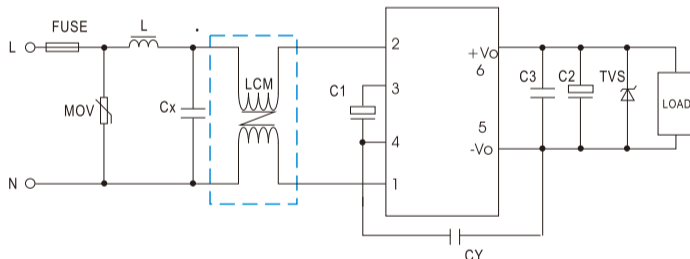
Output Characteristics

Parameter	Condition	Min	Typ	Max	Units
Output Voltage Accuracy	+Vo	--	±2	--	%
Load regulation	10%~100% load	--	±1.5	--	%
Line regulation	Vin(Min~Max)	--	±1.5	--	%
Ripple and noise	20MHz	--	50	150	mVp-p
Switching frequency	Full load,nominal input	--	60	--	KHz
Transient Recovery Time	25% Load Step Change	--	--	50	ms
Start-up time	At full load,230VAC	--	--	15	ms
Short circuit Protection		Continuous, Automatic Recovery			

General Characteristics

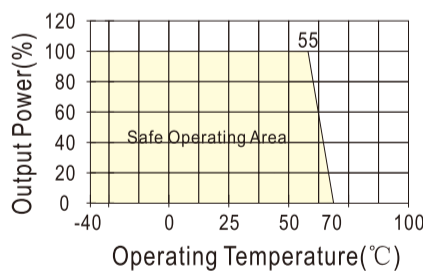
Parameter	Condition	Min	Typ	Max	Units
Operating Temperature	Case	-40	--	+70	°C
Storage		-40	--	+85	°C
Storage humidity		--	--	+85	%
Cooling	Free air convection	--	--	--	
Isolation voltage	Input-Output 1mA≤1minute	--	3000	--	VAC
Isolation resistance	500VDC	--	100	--	MΩ
MTBF	2×10 ⁵				K hours
EFT		IEC/EN 61000-4-4 level 4 4KV(Recommended circuit)			
EMC	Conduction and radiation	EN55011,EN55022 CLASS B(EMC Recommended circuit)			

Recommended circuit



1. FUSE : $I=3 \cdot V_o \cdot I_o / \text{efficiency} / V_{in}$
Recommend: 0.5A/250V
- 2.L: 1mH
- 3.MOV: 10D561K
- 4.LCM: 1mH/0.5A
- 5.Cx: 104/275VAC
- 6.C3: 104K/50V
- 7.CY: 1nF/400VAC
- 8.C1: 22uF/450V
- 9.C2: Reference value for capacitor
- 10.TVS: SMBJ6.5~30CA

Temperature Derating Graph Curve

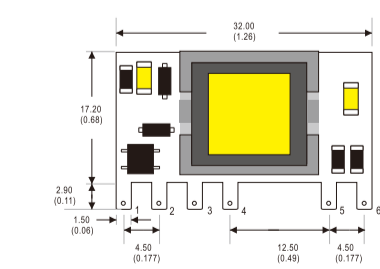


Note

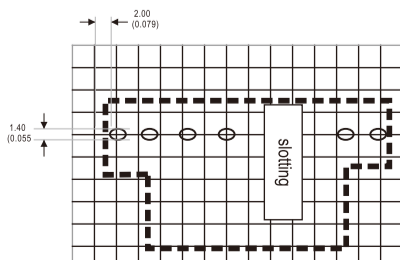
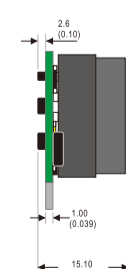
- 1.All the specifications typical at Ta=+25°C resistive load, nominal input voltage and rated output current unless otherwise noted.
- 2.Operation under no-load conditions will not damage these modules; however they may not meet all specifications listed.
- 3.Ripple & Noise measurement bandwidth is 0-20MHz.
- 3.Other input and output voltage may be available, please
- 4.All AC/DC converters should be externally fused at the front end for protection.
- 5.Specifications subject to change without notice

Mechanical Dimension & Pin Connections

Bottom View



Lateral View



Note:
Unit:mm(inch)

Pin	1	2	3	4	5	6
Single	L	N	C ⁺	C ⁻	-Vo	+Vo