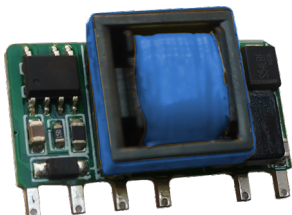


Features

- Efficiency up to 72%
- 3000VAC Isolation
- Single output
- short circuit protection
- Universal Input :85 ~ 264VAC,47~440Hz
- Wide temperature -40℃ to 70℃
- 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)		
AS5-S03R3	85-305	80-430	3.3	1000	1000	68
AS5-S05R3			5	1000	1000	72
AS5-S09R3			9	556	470	72
AS5-S12R3			12	420	470	78
AS5-S15R3			15	333	470	78
AS5-S24R3			24	210	220	78

Input Characteristics

Parameter	Condition	Min	Typ	Max	Units
Input Voltage Range	AC	85	--	305	VAC
	DC	120	--	430	VDC
Input Frequency	AC	47	--	63	Hz

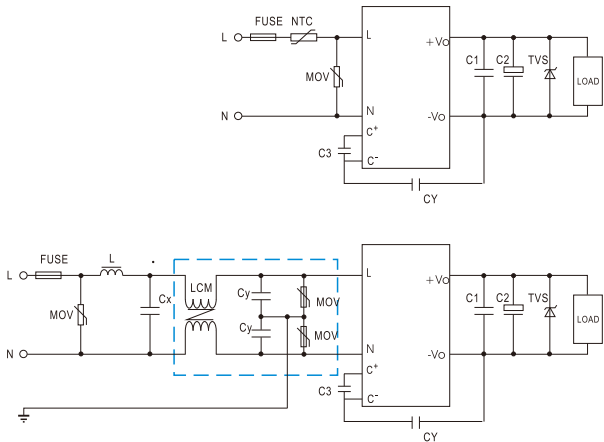
Output Characteristics

Parameter	Condition	Min	Typ	Max	Units
Output Voltage Accuracy	+Vo	--	±5	--	%
Load regulation	10%~100% load	--	±1.5	--	%
Line regulation	Vin(Min~Max)	--	±1.5	--	%
Ripple and noise	20MHz	--	80	150	mVp-p
Switching frequency	Full load,nominal input	--	60	--	KHz
Transient Recovery Time	25% Load Step Change	--	--	80	ms
Start-up time	At full load,230VAC	--	--	20	ms
Short circuit Protection		Continuous,Automatic Recovery			

General Characteristics

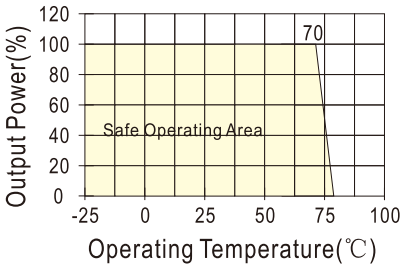
Parameter	Condition	Min	Typ	Max	Units
Operating Temperature	Case	-40	--	+70	℃
Storage		-40	--	+105	℃
Storage humidity		--	--	+95	%
Cooling	Free air convection	--	--	--	
Isolation voltage	Input-Output 1mA≤1minute	--	3000	--	VAC
Isolation resistance	500VDC	--	100	--	MΩ
MTBF	2×10 ⁵				K hours
EFT		IEC/EN 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: 14D561K
- 4.LCM: 5-20mH/0.5A
- 5.Cx: 104/275VAC
- 6.Cy: 102/400VAC
- 7.C3: 10uF/450V
- 8.CY:1nF/400VAC
- 9.C1: 104/50V
- 10.C2: Reference value for capacitor
- 11.TVS: SMBJ6.5~30CA

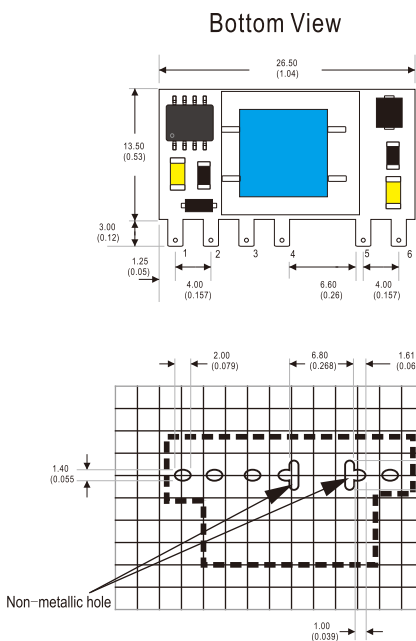
Temperature Derating Graph Curve



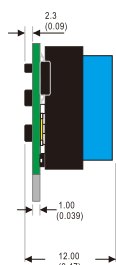
Note

- 1.All the specifications typical at Ta=+25℃ 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



Lateral View



Note:
Unit:mm(inch)

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