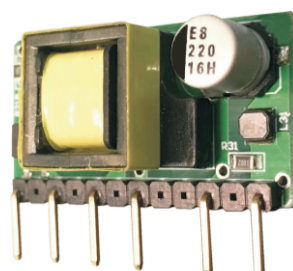


Features

- Efficiency up to 72%
- 3000VAC Isolation
- Single output
- short circuit protection
- Universal Input :85 ~ 264VAC,47~440Hz
- Wide temperature -25°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)		
AS3-S03	85-264	120-370	3.3	600	330	65
AS3-S05			5	600	220	70
AS3-S09			9	333	220	72
AS3-S12			12	250	100	72
AS3-S15			15	200	100	74
AS3-S24			24	125	100	78

Input Characteristics

Parameter	Condition	Min	Typ	Max	Units
Input Voltage Range	AC	85	--	264	VAC
	DC	120	--	375	VDC
Input Frequency	AC	47	--	440	Hz

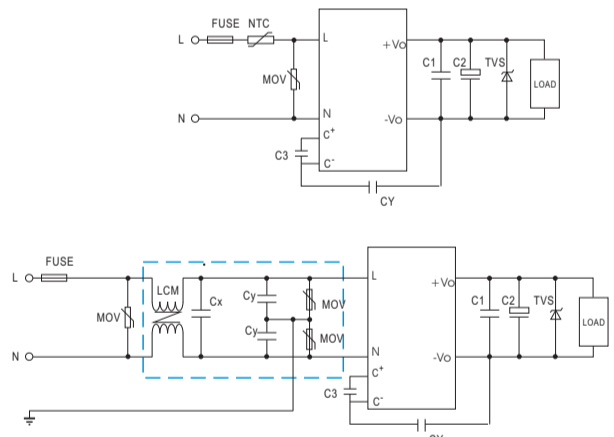
Output Characteristics

Parameter	Condition	Min	Typ	Max	Units
Output Voltage Accuracy	+Vo	--	±5	--	%
Load regulation	10%~100% load	--	±2	--	%
Line regulation	Vin(Min~Max)	--	±2	--	%
Ripple and noise	20MHz	--	80	150	mVp-p
Switching frequency	Full load,nominal input	--	60	--	KHz
Transient Recovery Time	25% Load Step Change	--	--	200	ms
Hold-up time		--	--	40	ms
Short circuit Protection		Continuous, Automatic Recovery			

General Characteristics

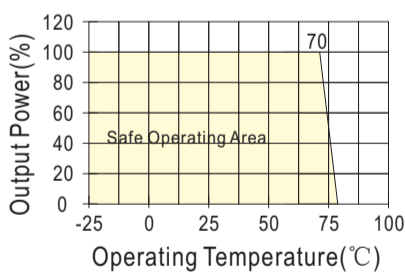
Parameter	Condition	Min	Typ	Max	Units
Operating Temperature	Case	-25	--	+70	°C
Storage		-40	--	+105	°C
Storage humidity		--	--	+95	%
Cooling	Free air convection	--	--	--	
Isolation voltage	Input-Output 1mA≤1minute	--	3000	--	VAC
Isolation resistance	500VDC	--	100	--	MΩ
MTBF	2×10 ⁵				K hours
Case material		Plastic			
EMC	Conduction and radiation	EN55011,EN55022 CLASS B(EMC Recommended circuit)			

Recommended circuit



1. FUSE : $I=3 \cdot Vo \cdot Io / \text{效率} / Vin$
Recommend: 0.5A/250V
2. NTC: 13D-5
3. MOV: 14D561K
4. LCM: 5-20mH/0.5A
5. Cx: 104/275VAC
6. Cy: 102/400VAC
7. C3: 4.7uF/450V
8. 2.2uF/400VAC
9. C1: 104/50V
10. C2: Reference value for capacitor
11. TVS: P6KE20CA, SMBJ20CA

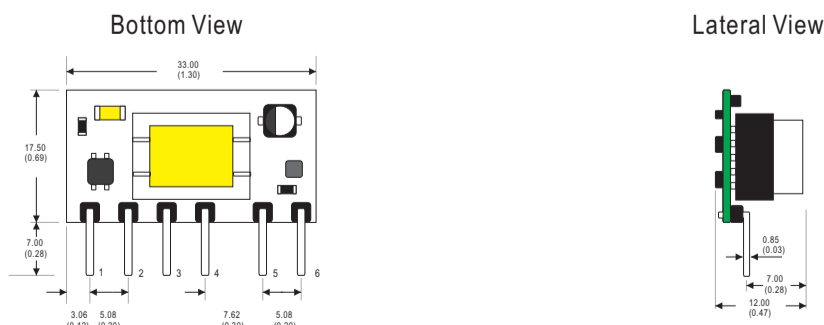
Temperature Derating Graph Curve



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



Note:
Unit:mm(inch)

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