

FEATURES:

- Ultra Compact Size 1.0" x 1.0" x 0.64" Package
- Universal Input: 90~264VAC
- High Efficiency Up To 85%
- Protection: Short Circuit/Overload/Overvoltage
- Fully Encapsulated Plastic Case
- UL/cUL/IEC/EN60950-1, 62368-1 Approved
- EMC Standard of EMI EN55032:2015 Approved
- EMC Standard of EMS EN55024:2010 Approved
- RoHS Compliant
- UL Recognized

Specifications typical at TA=25°C nominal input voltage and rated output current unless otherwise specified

Part Number	Output Wattage (W)	Output Voltage (V)	Output Current (mA)	Ripple & Noise (mV) Max (Note)	Efficiency (% TYP)	Max. Capacitive Load μF
AC5E-S03	5	3.3	1515	60	73	2200
AC5E-S04	5	4	1250	60	74	1600
AC5E-S05	5	5	1000	60	80	1000
AC5E-S09	5	9	555	90	81	300
AC5E-S12	5	12	416	120	81	160
AC5E-S15	5	15	333	150	82	100
AC5E-S24	5	24	208	240	82	43
AC5E-S48	5	48	104	480	84	10

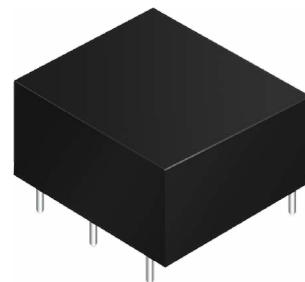
Note:

Ripple & noise is measured by using 20 MHz bandwidth, measured with 47uF paralleled with a high-frequency 0.47uF capacitor across each output by full load.

ADAM TECH

AC-DC Converter AC5E SERIES

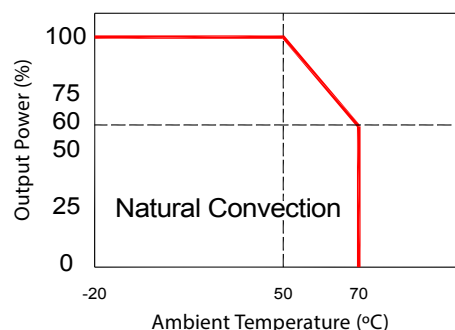
1~5Watt
3KV Isolated
Single Output
1" x 1" Package Module



Input Specifications

Parameters	Conditions		Min	Typ	Max	Units
Rated Input Voltage	Vo, lo nom		100~240			Vac
Voltage Range	Vo, lo nom	AC in	90		264	Vac
		DC in	120		370	Vdc
Line Frequency	Vi nom, lo nom		47	50	63	Hz
Inrush Current	lo nom	Vi:115VAC	5			A
		Vi:230VAC	10			A
Input Fuse	VDE/UL/CCC FUSE 2.5A/250V (Slow blow)					

Temperature Derating Graph



Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Output Voltage Accuracy	Vi nom, lo nom	3.3...5V Models		±3	%
		9...48V Models		±2	%
Minimum Load	Vi nom	0			%
Line Regulation	lo nom, Vi min...Vi max			±1.0	%
Load Regulation				±1.0	%
Transient Recovery Time	Vi nom, lo nom = ← → 0.5 lo nom		1000		uS
Protection	Over load	Above 110% rated output power Protection type: Recovers automatically after fault condition is removed			
	Short circuit	Recovers automatically after fault condition is removed			
	Over Voltage	120%-150% rated output Voltage Protection type: Zener diode clamp			

Note:

Ripple & noise is measured by using 20 MHz bandwidth, measured with a 10uf paralleled with a high-frequency 0.47uf capacitor across each output by full load.

General Specifications

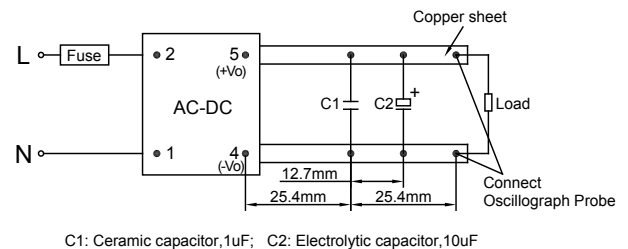
Parameters	Conditions	Min	Typ	Max	Units
Switching Frequency	Vi nom, lo nom		65		KHz
Isolation Voltage	Input / Output		3KVac/ 5mA/5Secs		
Isolation Resistance	Input / Output, @500 Vdc	100			MΩ
Operating Temperature	Refer to Temperature Derating Graph	-25		+70	°C
Storage Temperature	Non Operational	-40		+85	°C
Relative Humidity	Vi nom, lo nom			95	% RH
Safety Standards	UL 62368-1, IEC 62368-1 approved				
EMI Conduction & Radiation	Compliance to EN55032, CLASS B				
EMS Immunity	Compliance to EN61000				
Dimensions	L25.4 x W25.4 x H16.1 mm				
Cooling	Free air convection				

Part Number

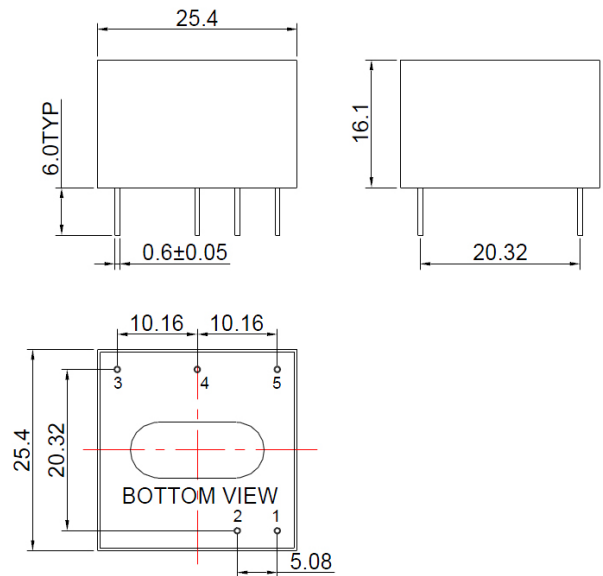
AC5E - S 05
A B C

A: Series
B: Single Output
C: Output Voltage

Parallel Line Measurements



Markings and Dimensions



UNIT: mm
Unless otherwise specified, all tolerances are ±0.50.

PIN Connection

PIN	1	2	3	4	5
GA5E	ACN	ACL	NC	-Vo	+Vo

Mouser Electronics

Authorized Distributor

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[AC5E-S04](#) [AC5E-S09](#) [AC5E-S12](#) [AC5E-S03](#) [AC5E-S48](#) [AC5E-S24](#) [AC5E-S05](#) [AC5E-S15](#)