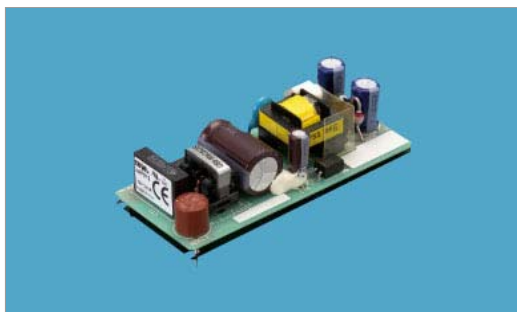


[Home](#) > Product Details

VAF5



Features

- Small and compact size
- Built-in Inrush Current Protection
- P.C. board mount AC/DC converter
- Built-in Over Voltage Protection
- RoHS Compliant

Safety Agency Approvals

- Complies with DEN-AN
- UL1950, C-UL recognized, TUV approved

EMI Compliance

- FCC-B
- CISPR22-B
- EN55022-B
- VCCI-B

EMC Compliance

- EN61000-4-2
- EN61000-4-3
- EN61000-4-4
- EN61000-4-5
- EN61000-4-6
- EN61000-4-8
- EN61000-4-11
- EN55022-B

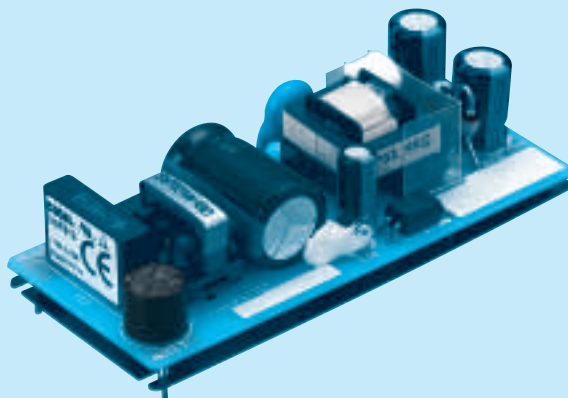
3 year warranty(refer to Instruction Manual)

Model	Input Voltage [V]	Output Wattage [W]	DC Output [V/A]
VAF503	DC 110 - 370 AC 85 - 264	3.3	3.3V 1A (peak 1.2A)
VAF505	DC 110 - 370 AC 85 - 264	5	5V 1A (peak 1.2A)
VAF512	DC 110 - 370 AC 85 - 264	5.4	12V 0.45A (peak 0.54A)
VAF524	DC 110 - 370 AC 85 - 264	5.28	24V 0.22A (peak 0.27A)

VAF5

VAF 5 05

① ② ③



① Series name
② Output wattage
③ Output voltage

MODEL	VAF503	VAF505	VAF512	VAF515	VAF524
MAX OUTPUT WATTAGE[W]	3.3	5.0	5.4	5.25	5.28
DC OUTPUT	VOLTAGE[V] 3.3 CURRENT[A] 1.0 (Peak 1.2)	5 1.0 (Peak 1.2)	12 0.45 (Peak 0.54)	15 0.35 (Peak 0.42)	24 0.22 (Peak 0.27)

SPECIFICATIONS

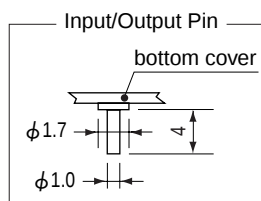
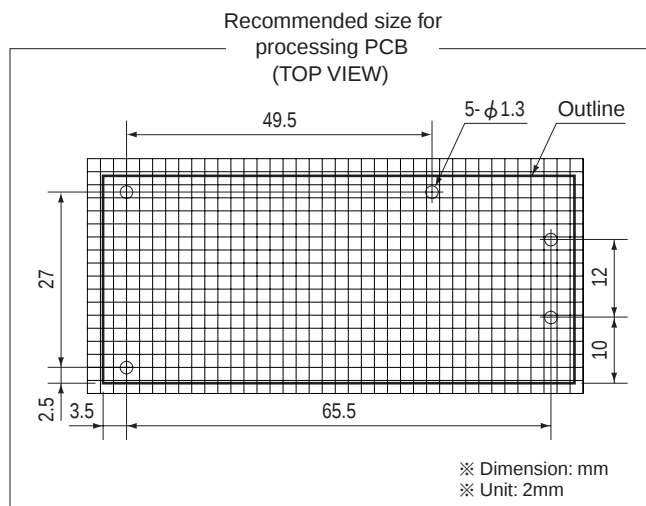
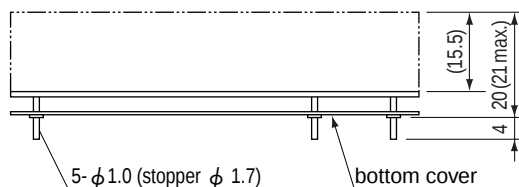
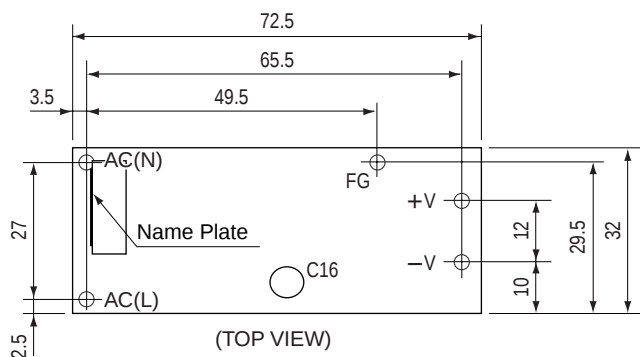
	MODEL	VAF503	VAF505	VAF512	VAF515	VAF524
INPUT	VOLTAGE[V]	AC85 - 264 1 ϕ or DC110 - 370				
	CURRENT[A]	ACIN 100V 0.15typ (Io=100%) ACIN 200V 0.10typ (Io=100%)				
	FREQUENCY[Hz]	47 - 440 or DC				
	INRUSH CURRENT[A]	ACIN 100V 15typ (Io=100%) ACIN 200V 30typ (Io=100%)				
	LEAKAGE CURRENT[ma]	0.5max (60Hz, According to IEC60950 and DEN-AN)				
	EFFICIENCY[%]	68typ	77typ	78typ	78typ	81typ
OUTPUT	VOLTAGE[V]	3.3	5	12	15	24
	CURRENT[A]	*1 1.0 (Peak 1.2)	1.0 (Peak 1.2)	0.45 (Peak 0.54)	0.35 (Peak 0.42)	0.22 (Peak 0.27)
	LINE REGULATION[mV]	20max	20max	48max	60max	96max
	LOAD REGULATION[mV]	40max	40max	100max	120max	150max
	RIPPLE[mVp-p]	0 to +55°C *2 80max -10 - 0°C *2 140max Io=100 - 120% *2 180max	80max 140max 180max	120max 160max 200max	120max 160max 200max	150max 200max 240max
	RIPPLE NOISE[mVp-p]	0 to +55°C *2 120max -10 - 0°C *2 160max Io=100 - 120% *2 200max	120max 160max 200max	150max 180max 220max	150max 180max 220max	200max 230max 260max
	TEMPERATURE COEFFICIENT[mV]	-10 to +55°C	100max	50max	120max	150max
	DRIFT[mV]	*3 20max	20max	48max	60max	96max
	OUTPUT VOLTAGE SETTING[V]	3.19 - 3.47	4.90 - 5.30	11.40 - 12.60	14.25 - 15.75	23.0 - 25.0
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Fixed				
	START-UP TIME[ms]	700max (ACIN 85V, Io=100%)				
	HOLD-UP TIME[ms]	10typ (ACIN 85V, Io=100%), 20typ (ACIN 100V, Io=100%)				
	OVERCURRENT PROTECTION	Works over 125% of rating and recovers automatically				
	OVERVOLTAGE PROTECTION	Works over 115% of rating (By zener diode clamping)				
ISOLATION	INPUT-OUTPUT	AC3,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (At Room Temperature)				
	INPUT-FG	AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (At Room Temperature)				
	OUTPUT-FG	AC500V 1minute, Cutoff current = 100mA, DC500V 50M Ω min (At Room Temperature)				
ENVIRONMENT	OPERATING TEMP., HUMID. AND ALTITUDE	-10 to +71°C, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max				
	STORAGE TEMP., HUMID. AND ALTITUDE	-20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max				
	VIBRATION	19.6m/s ² 10 - 55Hz, 3minutes period, 60minutes each along X, Y and Z axis (Non operating)				
	IMPACT	196.1m/s ² 11ms, once each X, Y and Z axis (Non operating)				
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS	UL60950-1, C-UL, EN60950-1, EN50178 Complies with DEN-AN and IEC60950-1				
	CONDUCTED NOISE	Complies with FCC-B, VCCI-B, CISPR22-B, EN55022-B				
OTHERS	CASE SIZE/WEIGHT	32X20X72.5mm (W×H×D) / 30g max				
	COOLING METHOD	Convection				

*1 Peak load for 10sec. or less in acceptable if the total wattage is less than the rated wattage.

*2 This is the value that measured on measuring board with capacitor of 22 μ F. Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN: RM101).

*3 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

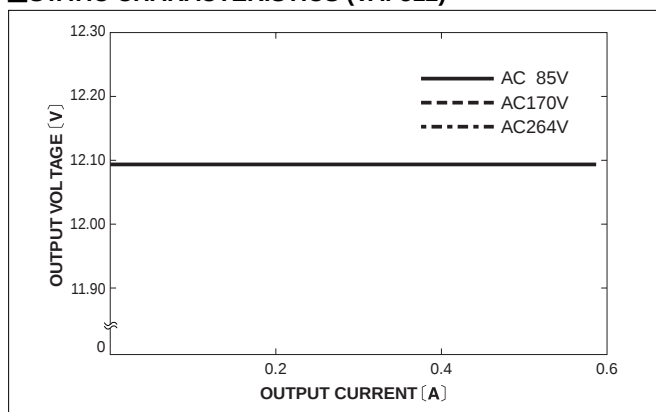
External view



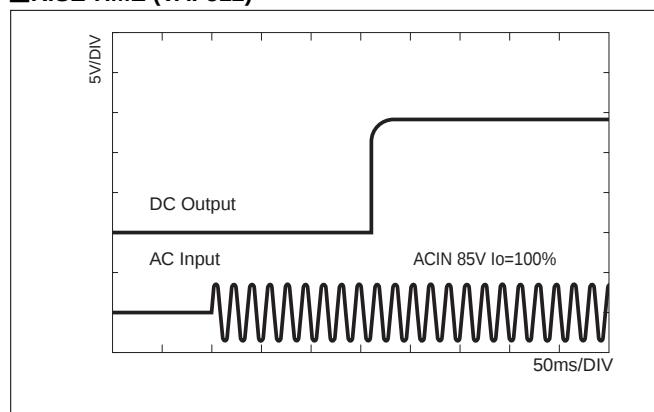
- ※ Weight: 30g or Less
- ※ Tolerance: ± 0.5
- ※ PCB material: CEM-3
- ※ PCB thickness: $t=1.0$
- ※ Pin material: CPW with solder plated
- ※ Bottom cover material: Bake PL 1256 (Black)
- ※ Recommended hole dia. to PCB: $\phi 1.3$

Performance data

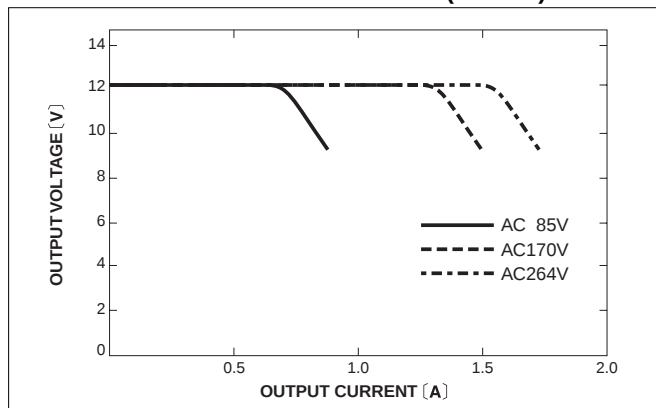
STATIC CHARACTERISTICS (VAF512)



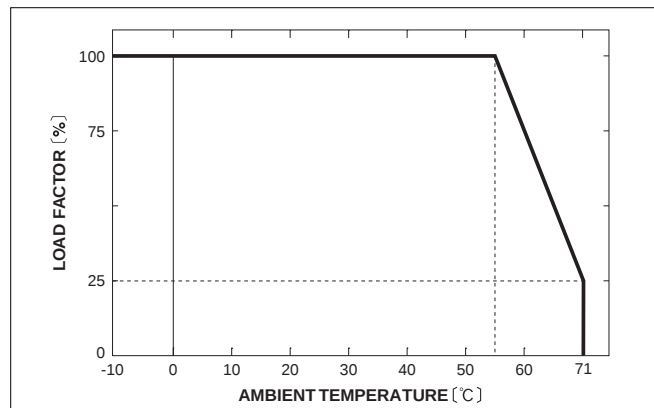
RISE TIME (VAF512)



OVERCURRENT CHARACTERISTICS (VAF512)



DERATING CURVE



VAF