



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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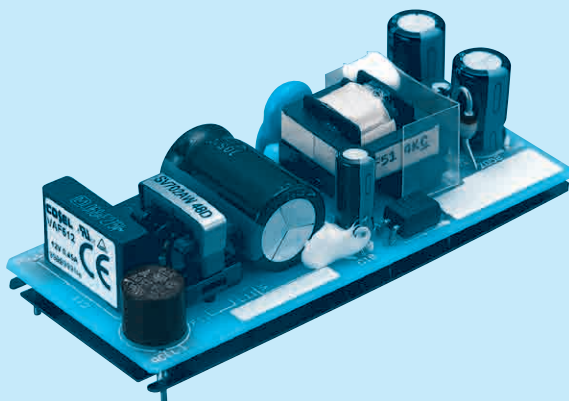
VAF5

VAF 5 05

① ② ③



RoHS



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	5	12	15	24
	CURRENT[A]	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)

SPECIFICATIONS

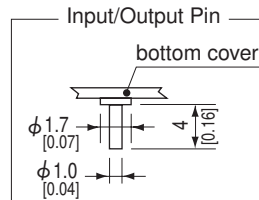
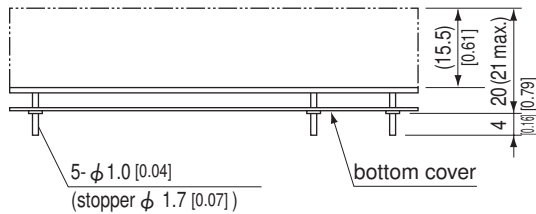
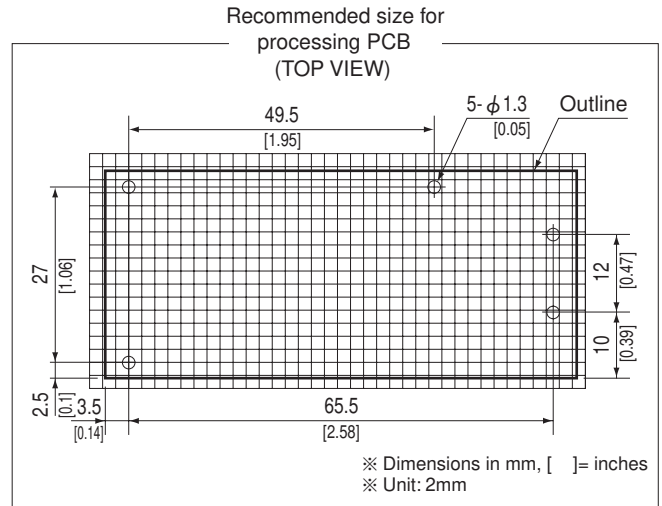
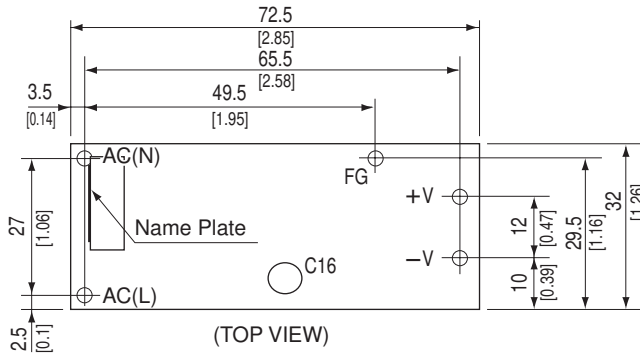
	MODEL	VAF503	VAF505	VAF512	VAF515	VAF524	
INPUT	VOLTAGE[V]	AC85 - 264 1 φ or DC110 - 370					
	CURRENT[A]	ACIN 100V	0.15typ (Io=100%)				
		ACIN 200V	0.10typ (Io=100%)				
	FREQUENCY[Hz]	47 - 440 or DC					
	INRUSH CURRENT[A]	ACIN 100V	15typ (Io=100%)				
		ACIN 200V	30typ (Io=100%)				
LEAKAGE CURRENT[mA]	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	80max	120max	120max	150max
		-10 - 0°C *2	140max	140max	160max	160max	200max
		Io=100 - 120% *2	180max	180max	200max	200max	240max
	RIPPLE NOISE[mVp-p]	0 to +55°C *2	120max	120max	150max	150max	200max
		-10 - 0°C *2	160max	160max	180max	180max	230max
		Io=100 - 120% *2	200max	200max	220max	220max	260max
	TEMPERATURE COEFFICIENT[mV]	-10 to +55°C	100max	50max	120max	150max	300max
	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%)					
PROTECTION CIRCUIT	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 50MΩ min (At Room Temperature)					
	INPUT-FG	AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)					
	OUTPUT-FG	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ 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	32 x 20 x 72.5mm [1.26 x 0.79 x 2.85 inches] (W x H x 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 μF. 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

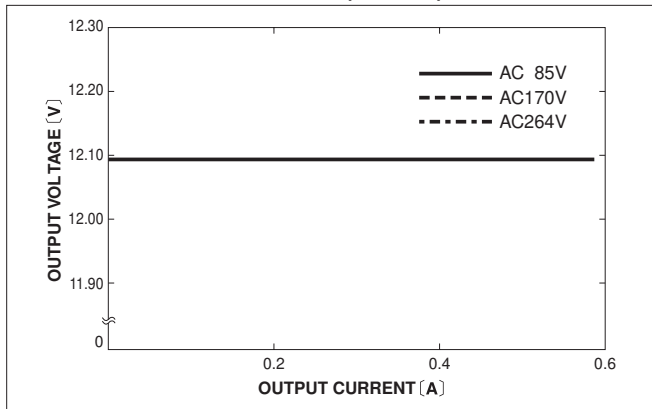


- ※Weight: 30g max
- ※Tolerance: ±0.5 [±0.02]
- ※PCB material: CEM-3
- ※PCB thickness: t=1.0 [0.04]
- ※Pin material: CPW with solder plated
- ※Recommended hole dia. to PCB: φ 1.3
- ※Dimensions in mm, []= inches

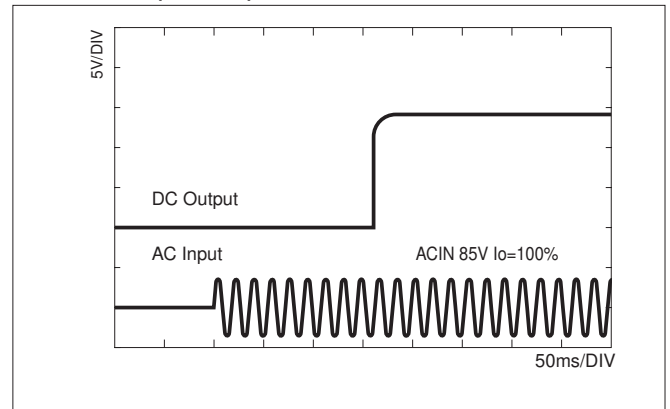
VAF

Performance data

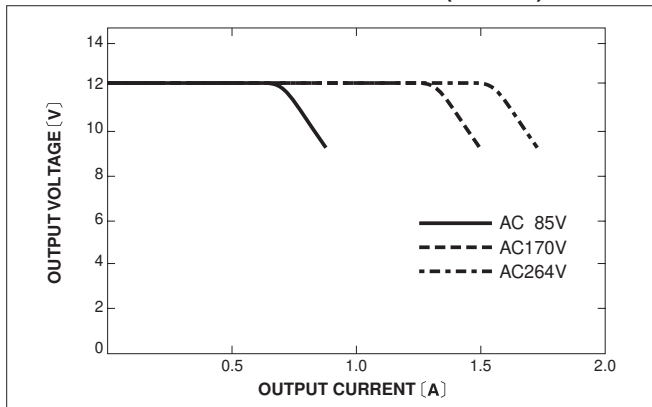
■ STATIC CHARACTERISTICS (VAF512)



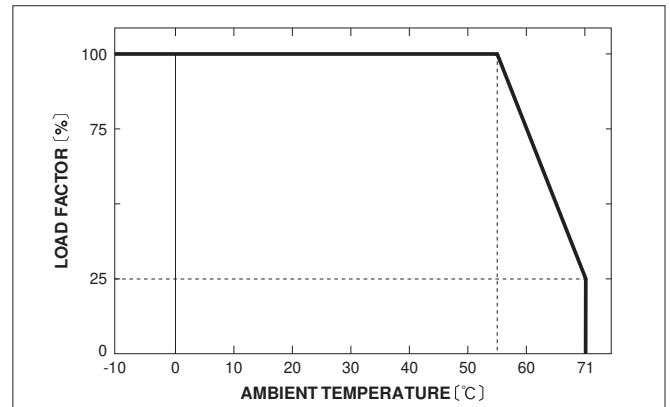
■ RISE TIME (VAF512)



■ OVERCURRENT CHARACTERISTICS (VAF512)



■ DERATING CURVE



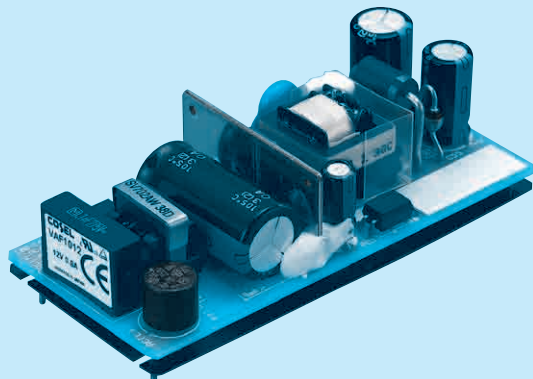
VAF10

VAF 10 05

① ② ③



RoHS



- ① Series name
- ② Output wattage
- ③ Output voltage

MODEL	VAF1003	VAF1005	VAF1012	VAF1015	VAF1024	
MAX OUTPUT WATTAGE[W]	6.6	10.0	10.8	10.5	10.8	
DC OUTPUT	VOLTAGE[V]	3.3	5	12	15	24
	CURRENT[A]	2.0 (Peak 2.4)	2.0 (Peak 2.4)	0.9 (Peak 1.08)	0.7 (Peak 0.84)	0.45 (Peak 0.54)

SPECIFICATIONS

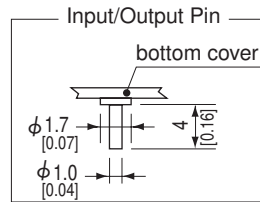
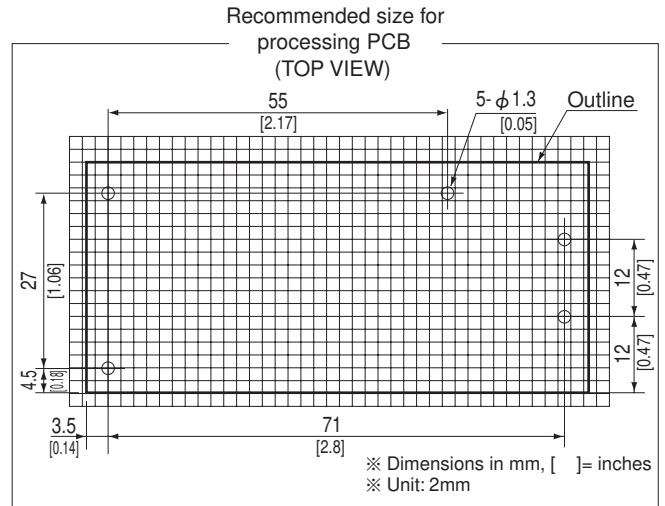
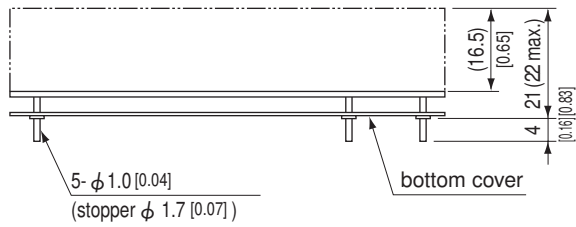
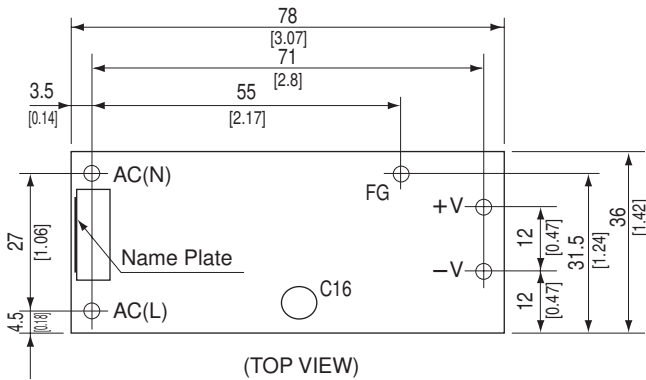
	MODEL	VAF1003	VAF1005	VAF1012	VAF1015	VAF1024	
INPUT	VOLTAGE[V]	AC85 - 264 1 φ or DC110 - 370					
	CURRENT[A]	ACIN 100V	0.3typ (Io=100%)				
		ACIN 200V	0.2typ (Io=100%)				
	FREQUENCY[Hz]	47 - 440 or DC					
	INRUSH CURRENT[A]	ACIN 100V	15typ (Io=100%)				
		ACIN 200V	30typ (Io=100%)				
LEAKAGE CURRENT[ma]	0.5max (60Hz, According to IEC60950 and DEN-AN)						
EFFICIENCY[%]		65typ	74typ	78typ	78typ	81typ	
OUTPUT	VOLTAGE[V]	3.3	5	12	15	24	
	CURRENT[A]	*1 2.0 (Peak 2.4)	2.0 (Peak 2.4)	0.9 (Peak 1.08)	0.7 (Peak 0.84)	0.45 (Peak 0.54)	
	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	80max	120max	120max	150max
		-10 - 0°C *2	140max	140max	160max	160max	200max
		Io=100 - 120% *2	180max	180max	200max	200max	240max
	RIPPLE NOISE[mVp-p]	0 to +55°C *2	120max	120max	150max	150max	200max
		-10 - 0°C *2	160max	160max	180max	180max	230max
		Io=100 - 120% *2	200max	200max	220max	220max	260max
	TEMPERATURE COEFFICIENT[mV]	-10 to +55°C	100max	50max	120max	150max	300max
	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%)					
PROTECTION CIRCUIT	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 50MΩ min (At Room Temperature)					
	INPUT-FG	AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)					
	OUTPUT-FG	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ 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	36 x 21 x 78mm [1.42 x 0.83 x 3.07 inches] (W x H x D) / 40g 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 μF. 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.

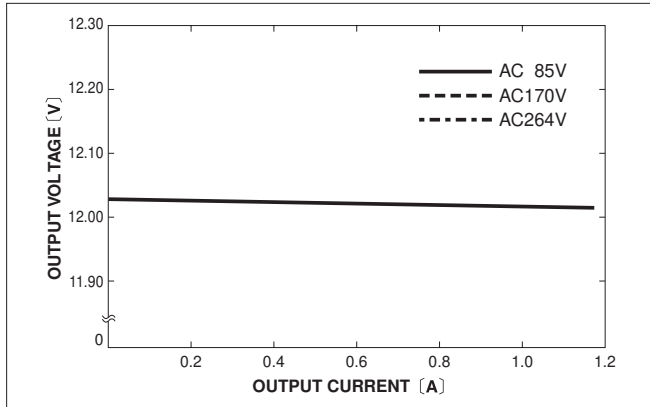
External view



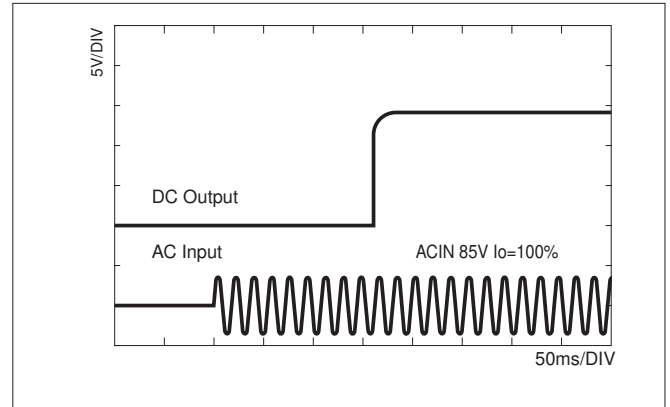
- ※ Weight: 40g max
- ※ Tolerance: ± 0.5 [± 0.02]
- ※ PCB material: CEM-3
- ※ PCB thickness: $t=1.0$ [0.04]
- ※ Pin material: CPW with solder plated
- ※ Recommended hole dia. to PCB: $\phi 1.3$
- ※ Dimensions in mm, []= inches

Performance data

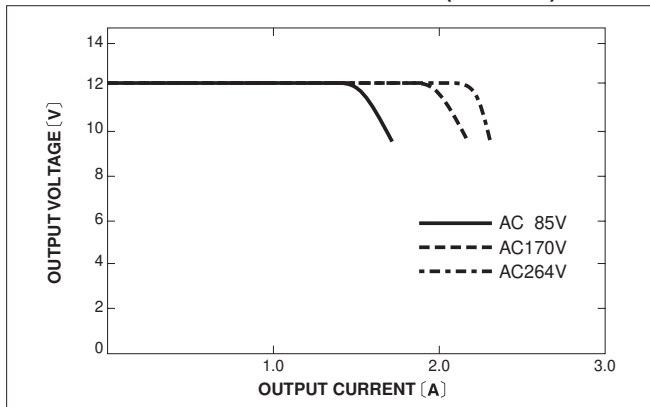
STATIC CHARACTERISTICS (VAF1012)



RISE TIME (VAF1012)



OVERCURRENT CHARACTERISTICS (VAF1012)



DERATING CURVE

