Ordering information

CURRENT[A] 1.0

05 **VAA**

0.45



Series name
 Output wattage
 Output voltage

MODEL VAA505 VAA512 MAX OUTPUT WATTAGE[W] 5.0 5.4 VOLTAGE[V] 5 12 DC OUTPUT

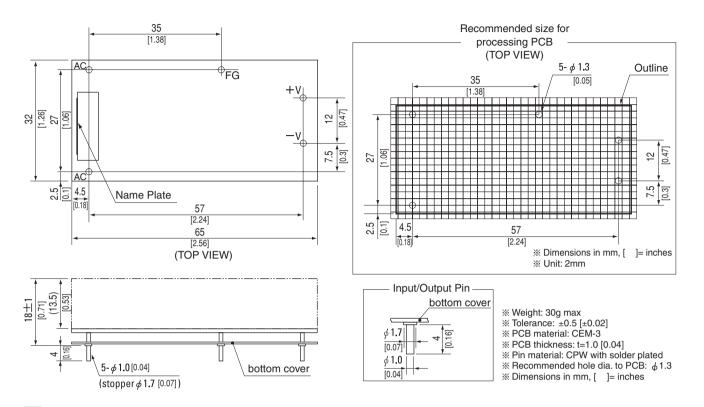
SPECIFICATIONS

NPUT AC85 - 132 1 \$\phi\$ or DC110 - 170	IVIOD	MODEL		VAA505	VAA512	
	VOLT	VOLTAGE[V]		AC85 - 132 1 φ or DC110 - 170		
FREQUENCY[Hz]	CURF	CURRENT[A] *1		0.13typ (ACIN 100V, Io=100%)		
FREQUENCY[Hz]	EFFIC	EFFICIENCY[%] *1		75typ	77typ	
LEAKAGE CURRENT[mA] 0.5max (60Hz According to UL and DEN-AN)	FREC	FREQUENCY[Hz]		47 - 440 or DC		
VOLTAGE[V] 5 12	INRU	INRUSH CURRENT[A] *1		15typ (ACIN 100V, Io=100%)		
CURRENT[A] 1.0 0.45	LEAK	LEAKAGE CURRENT[mA]		0.5max (60Hz According to UL and DEN-AN)		
LINE REGULATION[mV] 20max 48max 100max 100max 120max	VOLT	VOLTAGE[V]		5	12	
COAD REGULATION[mV] 40max 100max 120max 120max 160max	CURF	CURRENT[A]		1.0	0.45	
PROTECTION Colspan="2">CHROLD 0 to 4550 *2 domax 120 max 120 max 10 to 4550 *2 domax 150 max 150 max 150 max 160 max 180 max 10 to 4550 *2 domax 120 max DRIFT[mV] **3 20 max 48 max 0UTPUT VOLTAGE ADJUSTIMENT RANGE Fixed START-UP TIME[ms] 200 max (ACIN 85V, lo=100%) HOLD-UP TIME[ms] 10 typ (ACIN 85V, lo=100%), 20 typ (ACIN 100V, lo=100%) OUTPUT VOLTAGE SETTING[V] ** 4.90 - 5.30 11.40 - 12.60 PROTECTION OVERCURRENT PROTECTION Works over 105% of rating and recovers automatically OVERVOLTAGE PROTECTION Works over 115% of rating (by zener diode clamping)	LINE	NE REGULATION	N[mV]	20max	48max	
OUTPUT RIPPLE NOISE[mVp-p] -10 · 0°C *2 140max 160max 150max 150max 160max 160max 180max 180max TEMPERATURE COEFFICIENT[mV] · 10 to +55°C *5 50max 120max DRIFT[mV] **3 20max 48max OUTPUT VOLTAGE ADJUSTIMENT RANGE Fixed START-UP TIME[ms] 200max (ACIN 85V, lo=100%) HOLD-UP TIME[ms] 10typ (ACIN 85V, lo=100%), 20typ (ACIN 100V, lo=100%) OUTPUT VOLTAGE SETTING[V] ** 4.90 - 5.30 11.40 - 12.60 PROTECTION OVERCURRENT PROTECTION Works over 105% of rating and recovers automatically CIRCUIT OVERVOLTAGE PROTECTION Works over 115% of rating (by zener diode clamping)	LOAD	LOAD REGULATION[mV]		40max	100max	
OUTPUT RIPPLE NOISE[mVp-p] 10 + 55°C *2 120 max 150 max 150 max 180 max 1	DIDD	DDI E[m\/n_n]	0 to +55°C *2	80max	120max	
RIPPLE NOISE[mVp-p]	nirri	rrcc[iiivp-p]	-10 - 0℃ *2	140max	160max	
10.000 **2 160max 180max 180max 120max	DI IT DIDDI	DDI E NOISE[m\/n_n]	0 to +55°C *2	120max	150max	
DRIFT[mV]	MIFFE	FEE NOISE[IIIVP-P]	-10 - 0℃ *2	160max	180max	
OUTPUT VOLTAGE ADJUSTMENT RANGE Fixed START-UP TIME[ms] 200max (ACIN 85V, Io=100%) HOLD-UP TIME[ms] 10typ (ACIN 85V, Io=100%), 20typ (ACIN 100V, Io=100%) OUTPUT VOLTAGE SETTING[V] ** 4.90 - 5.30 11.40 - 12.60 PROTECTION OVERCURRENT PROTECTION Works over 105% of rating and recovers automatically CIRCUIT OVERVOLTAGE PROTECTION Works over 115% of rating (by zener diode clamping)	TEMPERA	PERATURE COEFFICIENT[mV]	-10 to +55℃	50max	120max	
START-UP TIME[ms] 200max (ACIN 85V, Io=100%) HOLD-UP TIME[ms] 10typ (ACIN 85V, Io=100%), 20typ (ACIN 100V, Io=100%) 0UTPUT VOLTAGE SETTING[V] ** 4.90 - 5.30 11.40 - 12.60 PROTECTION OVERCURRENT PROTECTION OVERCURRENT PROTECTION OVERVOLTAGE PROTECTION	DRIF	DRIFT[mV] *3		20max	48max	
HOLD-UP TIME[ms] 10typ (ACIN 85V, lo=100%), 20typ (ACIN 100V, lo=100%) OUTPUT VOLTAGE SETTING[V] ** 4.90 - 5.30 11.40 - 12.60 PROTECTION OVERCURRENT PROTECTION Works over 105% of rating and recovers automatically CIRCUIT OVERVOLTAGE PROTECTION Works over 115% of rating (by zener diode clamping)	OUTPUT	OUTPUT VOLTAGE ADJUSTMENT RANGE		Fixed		
OUTPUT VOLTAGE SETTING[V] *1 4.90 - 5.30	STAP	START-UP TIME[ms]		200max (ACIN 85V, Io=100%)		
PROTECTION CIRCUIT OVERCURRENT PROTECTION Works over 105% of rating and recovers automatically OVERVOLTAGE PROTECTION Works over 115% of rating (by zener diode clamping)	HOLD	HOLD-UP TIME[ms]		10typ (ACIN 85V, lo=100%), 20typ (ACIN 100V, lo=100%)		
CIRCUIT OVERVOLTAGE PROTECTION Works over 115% of rating (by zener diode clamping)				1.00		
OVERVOEINGET HOTEOTION WORKS OVER 11378 OF Taking (by Zener Glode Glamping)						
INDIT OUTDUT	UIT OVER	OVERVOEIAGE I HOTEOHOR				
AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M\(\Omega\) min (At Room Temperature)	INPU'	INPUT-OUTPUT		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (At Room Temperature)		
ISOLATION INPUT-FG AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M $Ω$ min (At Room Temperature)	ATION INPU	INPUT-FG				
OUTPUT-FG AC500V 1minute, Cutoff current = 100mA, DC500V 50M Ω min (At Room Temperature)	OUTF	OUTPUT-FG				
	OPERAT	. , ,		,		
ENVIDONMENT	ONMENT -			, , , , , , , , , , , , , , , , , , ,		
VIBRATION 19.6m/s² 10 - 55Hz, 3minutes period, 60minutes each along X, Y and Z axis (Non operating)	VIBR	VIBRATION		19.6m/s² 10 - 55Hz, 3minutes period, 60minutes each along X, Y and Z axis (Non operating)		
. 1 0				196.1m/s ² 11ms, once each X, Y and Z axis (Non operating)		
SAFETY AND NOISE AGENCY APPROVALS UL60950-1, C-UL Complies with DEN-AN (External Fuse is required)						
REGULATIONS CONDUCTED NOISE Complies with FCC-B, additional capacitors required for meeting VCCI class B	ATIONS CONI	ONS CONDUCTED NOISE		Complies with FCC-B, additional capacitors required for meeting VCCI class B		
OTHERS CASE SIZE/WEIGHT 32 × 18 × 65mm [1.26 × 0.71 × 2.56 inches] (W × H × D) / 30g max	FRS —					
COOLING METHOD Convection	C00I	COOLING METHOD		Convection		

- *1 Rated input/output Ta=25°C
 *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 charge 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.

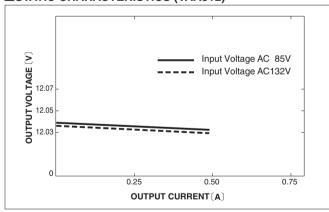
VAA-2 March 13, 2019

External view

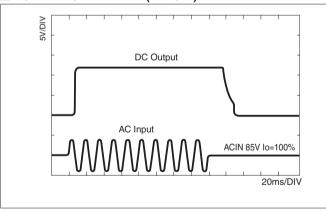


Performance data

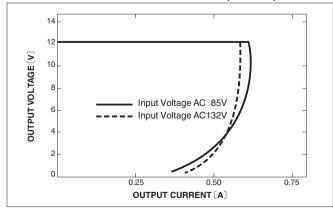
■STATIC CHARACTERISTICS (VAA512)



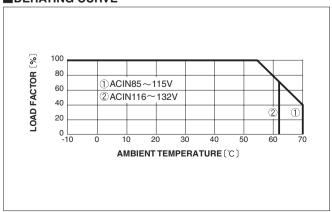
■RISE TIME & FALL TIME (VAA512)



OVERCURRENT CHARACTERISTICS (VAA512)



DERATING CURVE



Ordering information

VAA10

VAA 10 05



Series name
 Output wattage
 Output voltage

MODEL		VAA1005	VAA1012
MAX OUTPUT WATTAGE[W]		10.0	10.8
DC OUTDUT	VOLTAGE[V]	5	12
DC OUTPUT	CURRENT[A]	2.0	0.9

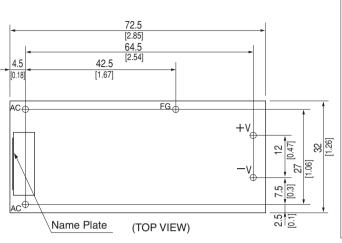
SPECIFICATIONS

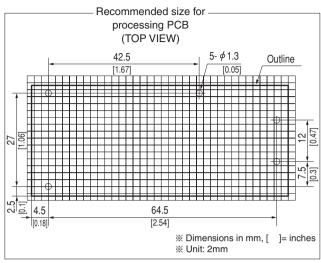
	MODEL		VAA1005	VAA1012	
	VOLTAGE[V]		AC85 - 132 1 φ or DC110 - 170		
INPUT	CURRENT[A] *1		0.3typ (ACIN 100V, Io=100%)		
	EFFICIENCY[%] *1		76typ	77typ	
	FREQUENCY[Hz]		47 - 440 or DC		
	INRUSH CURRENT	Γ[A] *1	15typ (ACIN 100V, Io=100%)		
	LEAKAGE CURRENT[mA]		0.5max (60Hz According to UL and DEN-AN)		
	VOLTAGE[V]		5	12	
	CURRENT[A]		2.0	0.9	
	LINE REGULATION	V[mV]	20max	48max	
	LOAD REGULATIO	N[mV]	40max	100max	
	RIPPLE[mVp-p]	0 to +55°C *2	80max	120max	
_	MIFFEE[IIIVP-P]	-10 - 0℃ *2	140max	160max	
	RIPPLE NOISE[mVp-p]	0 to +55°C *2	120max	150max	
	NIFFEE NOISE[IIIVP-P]	-10 - 0℃ *2	160max	180max	
	TEMPERATURE COEFFICIENT[mV]	-10 to +55℃	50max	120max	
	DRIFT[mV] *3		20max	48max	
	OUTPUT VOLTAGE ADJUSTMENT RANGE		Fixed		
	START-UP TIME[ms]		200max (ACIN 85V, Io=100%)		
	HOLD-UP TIME[ms]		10typ (ACIN 85V, Io=100%), 20typ (ACIN 100V, Io=100%)		
	OUTPUT VOLTAGE SETTING[V] *1		4.90 - 5.30	11.40 - 12.60	
			Works over 105% of rating and recovers automatically		
CIRCUIT	OVERVOLTAGE PROTECTION		Works over 115% of rating (by zener diode clamping)		
	INPUT-OUTPUT		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (At Room Temperature)		
ISOLATION			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		,		
	STORAGE TEMP.,HUMID.AND ALTITUDE		3, ,		
	VIBRATION		19.6m/s² 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	AGENCY APPROVALS		UL60950-1, C-UL Complies with DEN-AN (External Fuse is required)		
REGULATIONS	CONDUCTED NOISE		Complies with FCC-B, additional capacitors required for meeting VCCI class B		
OTHERS	CASE SIZE/WEIGHT		32 X 18 X 72.5mm [1.26 X 0.71 X 2.85 inches] (WX H X D) / 35g max		
	COOLING METHOD		Convection		

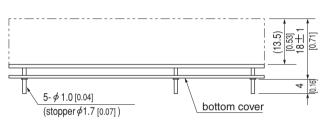
*1 Rated input/output Ta=25°C
 *2 This is the value that measured on measuring board with capacitor of 22 µ F. Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN: RM101).
 *3 Drift is the charge in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

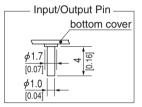
VAA-4 March 13, 2019

External view





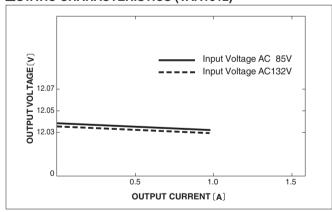




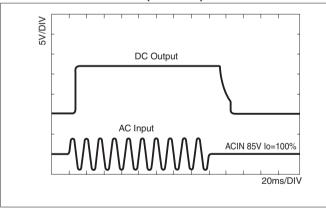
- Weight: 35g max
 Tolerance: ±0.5 [±0.02]
 PCB material: CEM-3
 PCB thickness: t=1.0 [0.04]
 Pin material: CPW with solder plated * Recommended hole dia. to PCB: φ1.3
- ※ Dimensions in mm, []= inches

Performance data

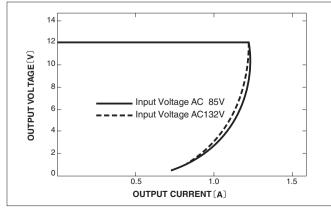
■STATIC CHARACTERISTICS (VAA1012)



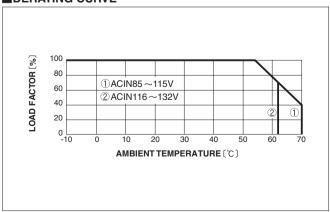




■OVERCURRENT CHARACTERISTICS (VAA1012)



■DERATING CURVE



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Switching Power Supplies category:

Click to view products by Cosel manufacturer:

Other Similar products are found below:

70841011 73-551-0005 73-551-0048 PS3E-B12F PS3E-E12F AAD600S-4-OP R22095 KD0204 9021 LDIN100150 LPM000-BBAR-01 LPX17S-C EVS57-10R6/R FP80 FRV7000G 22929 PS3E-F12F CQM1IA121 40370121900 VI-PU22-EXX 40370121910 LDIN5075 LPM615-CHAS LPX140-C 09-160CFG 70841025 VPX3000-CBL-DC VI-LUL-IU LPM000-BBAR-05 LPM000-BBAR-08 LPM124-OUTA1-48 LPM000-BBAR-07 LPM109-OUTA1-10 LPM616-CHAS 08-30466-1055G 08-30466-2175G 08-30466-2125G DMB-EWG TVQF-1219-18S 6504-226-2101 CQM1IPS01 SP-300-5 CQM1-IPS02 VI-MUL-ES 22829 08-30466-0065G VI-RU031-EWWX 08-30466-0028G EP3000AC48INZ VP-C2104853