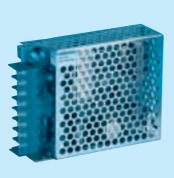
Ordering information

# RMB15A

**RMB 15A** 

RMB

c**FL**°us RoHS





- ①Series name ②Output wattage
- 3 Output voltage combina-
- Optional \*1
   J :Connector type
   N :with Cover

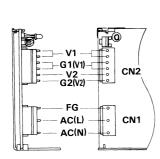
MODEL		RMB15A-1	RMB15A-2
DC OUTPUT	V1	+5V 0.8A	+5V 0.8A
	V2	+12V 1.0(Peak 1.3)A	+24V 0.5(Peak 0.65)A

# **SPECIFICATIONS**

	MODEL		RMB15A-1 RMB15A-2				
	VOLTAGE[V]		AC85 - 132 1 $\phi$ or DC110 - 170				
	CURRENT[A]	ACIN 100V	0.45typ (lo=100%)				
	FREQUENCY[Hz]		47 - 440 or DC				
	EFFICIENCY[%]	ACIN 100V	68typ (lo=100%)				
	INRUSH CURRENT[A]	ACIN 100V	20typ (lo=100%) (At cold	start)			
	VOLTAGE[V]		+5	+12	+5	+24	
	CURRENT[A]		0 - 0.8	0 - 1.0 (Peak 1.3)	0 - 0.8	0 - 0.5 (Peak 0.65)	
	LINE REGULATION	N[mV]	20max	48max	20max	96max	
	LOAD REGULATIO	N[mV]	150max	100max	150max	150max	
	DIDDI E[m\/n n]	0 to +50℃	100max	120max	100max	120max	
	RIPPLE[mVp-p]	-10 - 0℃	140max	160max	140max	160max	
OUTPUT	DIDDI E NOICEIVr1	0 to +50°C	120max	150max	120max	150max	
OUIPUI	RIPPLE NOISE[mVp-p]	-10 - 0℃	160max	180max	160max	180max	
	TEMPEDATURE RECUI ATIONIVI	0 to +50℃	150max	120max	150max	240max	
	TEMPERATURE REGULATION[mV]	-10 to +50℃	180max	150max	180max	290max	
	START-UP TIME[ms] HOLD-UP TIME[ms] OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		100max (ACIN 85V, Io=100%)				
			10typ (ACIN 85V, Io=100%, 0 to +50℃) 20typ (ACIN 100V, Io=100%, 0 to +50℃)				
			5.00 - 5.25	Fixed	5.00 - 5.25	Fixed	
	OUTPUT VOLTAGE SETTING[V]			11.40 - 12.60		22.80 - 25.20	
PROTECTION	OVERCURRENT PROTECTION		, ,				
<b>CIRCUIT AND</b>	OVERVOLTAGE PROTECTION		By zener diode clamping	(+5V)			
OTHERS	OPERATING INDICATION		( and a sign of the sign of th				
	INPUT-OUTPUT		AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature)				
ISOLATION	INPUT-FG, COVER		AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature)				
ISOLATION	OUTPUT-FG, COVE	ER	AC500V 1minute, DC500V 50MΩmin (At Room Temperature)				
	OUTPUT-OUTPUT(V1-V2)		AC100V 1minute, DC100V	$V$ 10M $\Omega$ min (At Room Ter	nperature)		
	OPERATING TEMP.,HUMID.AND	ALTITUDE	-10 to +60℃, 20 - 90%RF	l (Non condensing) (Refer	to DERATING CURVE), 3,	000m (10,000feet) max	
ENVIRONMENT	ONMENT STORAGE TEMP.;HUMID.AND ALTITUDE VIBRATION		-20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max				
ENVIRONMENT			10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis				
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis				
SAFETY AND NOISE	AGENCY APPROV	ALS	UL60950-1, C-UL Complies with DEN-AN				
REGULATIONS	NS CONDUCTED NOISE		Complies with FCC-B, VCCI-B				
OTHERS	CASE SIZE/WEIGH	IT	28 x 80 x 100mm (W x H x	(D) /250g max (without co	ver)		
	COOLING METHOD		Convection				

- \*1 Please contact us about safety approvals for the model with option.
   \* Avoid prolonged use under over-load.
- Series/Parallel operation with other model is not possible.
- Derating is required when operated with case cover.

## **External view**

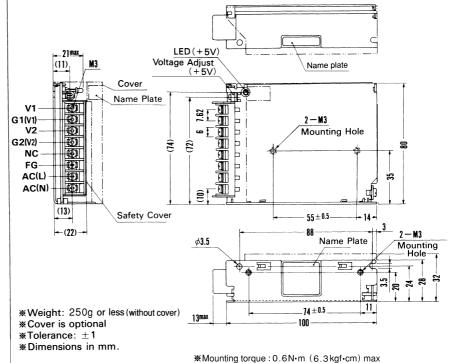


I/O	Connector	Mating Connector
CN1	B3P5-VH	VHR-5N
CN2	B6P-VH	VHR-6N
		(Mfr:J.S.T.)

Terminal
Chain: SVH-21-P1.1
Loose: BVH-21-P1.1
(Mfr:J.S.T.)

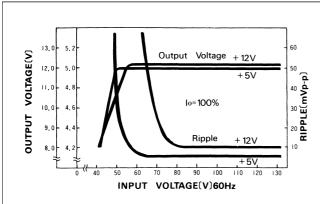
Connector type

Barrier strip type

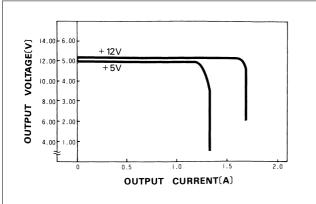


#### Performance data

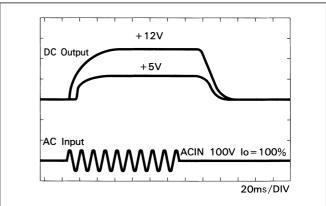
## ■STATIC CHARACTERISTICS (RMB15A-1)



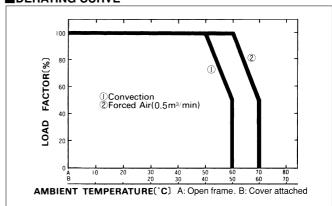
## ■OVERCURRENT CHARACTERISTICS (RMB15A-1)



#### ■RISE TIME & FALL TIME (RMB15A-1)



#### **■**DERATING CURVE



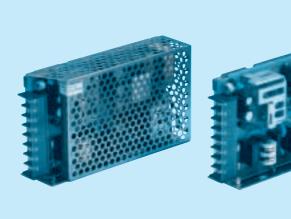
## Ordering information

# RMB30A

**RMB 30A** 

RMB

c**FL**°us RoHS



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

- Optional \*1
   J :Connector type
   N :with Cover

MODEL		RMB30A-1	RMB30A-2
DC OUTPUT	V1	+5V 1.5A	+5V 1.5A
	V2	+12V 2.0(Peak 2.8)A	+24V 1.0(Peak 1.4)A

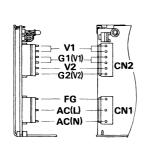
## **SPECIFICATIONS**

	MODEL		RMB30A-1 RMB30A-2				
	VOLTAGE[V]		AC85 - 132 1 φ or DC110 - 170				
	CURRENT[A] ACIN 100V		0.9typ (Io=100%)				
	FREQUENCY[Hz]		47 - 440 or DC				
	EFFICIENCY[%]	ACIN 100V	69typ (lo=100%)				
	INRUSH CURRENT[A]	ACIN 100V	30typ (Io=100%) (At cold start)				
	VOLTAGE[V]		+5	+12	+5	+24	
	CURRENT[A]		0 - 1.5	0 - 2.0 (Peak 2.8)	0 - 1.5	0 - 1.0 (Peak 1.4)	
	LINE REGULATION	N[mV]	20max	48max	20max	96max	
	LOAD REGULATIO	N[mV]	150max	100max	150max	150max	
	RIPPLE[mVp-p]	0 to +50℃	100max	120max	100max	120max	
	1111 1 EE[111VP-P]	-10 - 0℃	140max	160max	140max	160max	
OUTPUT	RIPPLE NOISE[mVp-p]	0 to +50°C	120max	150max	120max	150max	
0011 01	TIII T EE NOISE[IIIVP-P]	-10 - 0℃	160max	180max	160max	180max	
	TEMPERATURE REGULATION[mV]	0 to +50℃	150max	120max	150max	240max	
	TEMI ENATONE NEGOEATION[III7]	-10 to +50℃	180max	150max	180max	290max	
	START-UP TIME[m	s]	100max (ACIN 85V, Io=100%)				
	HOLD-UP TIME[ms]		10typ (ACIN 85V, lo=100%, 0 to +50℃) 20typ (ACIN 100V, lo=100%, 0 to +50℃)				
	OUTPUT VOLTAGE ADJUSTMENT	range[v]	5.00 - 5.25	Fixed	5.00 - 5.25	Fixed	
	OUTPUT VOLTAGE SETTING[V]			11.40 - 12.60		22.80 - 25.20	
PROTECTION			, , , , , , , , , , , , , , , , , , , ,				
CIRCUIT AND OTHERS	OVERVOLTAGE PROTECTION		Works at 115 - 140% of rating (+5V)				
OTHERS	OPERATING INDICATION						
	INPUT-OUTPUT		AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature)				
ISOLATION	INPUT-FG, COVER		AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature)				
1002/111011	OUTPUT-FG, COVE		AC500V 1minute, DC500V 50MΩmin (At Room Temperature)				
	OUTPUT-OUTPUT(		AC100V 1minute, DC100V		<u>'</u>		
	OPERATING TEMP.;HUMID.AND ALTITUDE		9, 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
ENVIRONMENT	STORAGE TEMP.;HUMID.AND	ALTITUDE	3,,				
	VIBRATION		10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis				
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis				
NOISE	AGENCY APPROV		UL60950-1, C-UL Complies with DEN-AN				
REGULATIONS	CONDUCTED NOIS		Complies with FCC-B, VCCI-B				
OTHERS	CASE SIZE/WEIGH			(D) /350g max (without co	ver)		
	COOLING METHOD		Convection				

- Please contact us about safety approvals for the model with option. Avoid prolonged use under over-load.
- Series/Parallel operation with other model is not possible.
- Derating is required when operated with case cover.



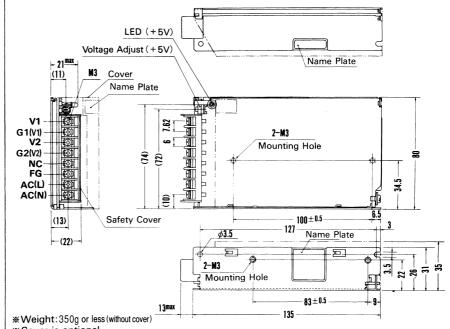
## **External view**



I/O	Connector	Mating Connector
CN1	B3P5-VH	VHR-5N
CN2	B6P-VH	VHR-6N
		(Mfr. IST)

Terminal Chain: SVH-21-P1.1 Loose: BVH-21-P1.1 (Mfr:J.S.T.)

Connector type



**★Cover** is optional ★Tolerance: ±1

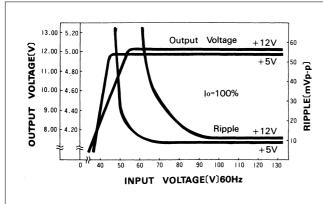
※ Dimensions in mm.

Barrier strip type

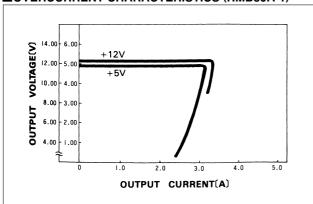
Mounting torque: 0.6N⋅m (6.3kgf⋅cm) max

#### Performance data

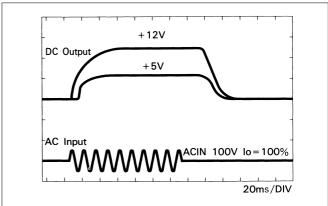
## **■STATIC CHARACTERISTICS (RMB30A-1)**



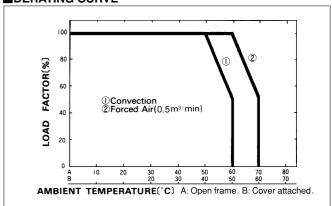
#### **■**OVERCURRENT CHARACTERISTICS (RMB30A-1)



#### ■RISE TIME & FALL TIME (RMB30A-1)



## **DERATING CURVE**



COSEL

**AC-DC Power Supplies Enclosed type** 

RMB50A

Ordering information

**RMB 50A** 

RMB

c**FL**°us RoHS

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

- ①Optional \*1
  G:Low leakage current
  J:Connector type
  N:with Cover

MODEL		RMB50A-1	RMB50A-2
DC OUTPUT	V1	+5V 1.5A	+5V 1.5A
	V2	+12V 3.6(Peak 4)A	+24V 1.8(Peak 2)A

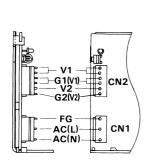
## **SPECIFICATIONS**

	MODEL		RMB50A-1 RMB50A-2				
	VOLTAGE[V]		AC85 - 132 1 φ or DC110 - 170				
	CURRENT[A] ACIN 100V		1 1.4typ (lo=100%)				
INPUT	FREQUENCY[Hz]		47 - 440 or DC				
	EFFICIENCY[%]	ACIN 100V	74typ (lo=100%)				
	INRUSH CURRENT[A]	ACIN 100V	30typ (lo=100%) (At cold start)				
	VOLTAGE[V]		+5	+12	+5	+24	
	CURRENT[A]		0 - 1.5	0 - 3.6 (Peak 4)	0 - 1.5	0 - 1.8 (Peak 2)	
	LINE REGULATION	V[mV]	20max	48max	20max	96max	
	LOAD REGULATIO	N[mV]	150max	100max	150max	150max	
	RIPPLE[mVp-p]	0 to +50℃	80max	120max	80max	120max	
	mr r LL[mvp-p]	-10 - 0℃	140max	160max	140max	160max	
OUTPUT	RIPPLE NOISE[mVp-p]	0 to +50℃	120max	150max	120max	150max	
OUIFUI	mirree Noise[iiivp-p]	-10 - 0℃	160max	180max	160max	180max	
	   TEMPERATURE REGULATION[mV]	0 to +50℃	150max	120max	150max	240max	
	TEMPENATURE REGULATION[IIIV]	-10 to +50℃	180max	150max	180max	290max	
	START-UP TIME[m	s]	100max (ACIN 85V, Io=100%)				
	HOLD-UP TIME[ms]		10typ (ACIN 85V, lo=100%, 0 to +50℃) 20typ (ACIN 100V, lo=100%, 0 to +50℃)				
	OUTPUT VOLTAGE ADJUSTMENT	range[v]	5.00 - 5.25	Fixed	5.00 - 5.25	Fixed	
	OUTPUT VOLTAGE SETTING[V]			11.40 - 12.60		22.80 - 25.20	
PROTECTION	OVERCURRENT PROTECTION		, , , , , , , , , , , , , , , , , , , ,				
	OVERVOLTAGE PROTECTION		Works at 115 - 140% of rating (+5V)				
OTHERS	OPERATING INDICATION						
	INPUT-OUTPUT		AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature)				
ISOLATION	INPUT-FG, COVER		AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature)				
ISOLATION	OUTPUT-FG, COVER		AC500V 1minute, DC500V 50MΩmin (At Room Temperature)				
	OUTPUT-OUTPUT(		AC100V 1minute, DC100V 10M $\Omega$ min (At Room Temperature)				
	OPERATING TEMP.,HUMID.AND ALTITUDE		,				
ENVIRONMENT	STORAGE TEMP.,HUMID.AND	ALTITUDE	-20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max				
LIVIIIOMMENT	VIBRATION		10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis				
	IMPACT		196.1m/s² (20G), 11ms, once each X, Y and Z axis				
NOISE	AGENCY APPROV		UL60950-1, C-UL Complies with DEN-AN				
REGULATIONS	CONDUCTED NOIS	SE	Complies with FCC-B, VCCI-B				
OTHERS	CASE SIZE/WEIGH	łT	31 × 93 × 155mm (W × H ×	(D) /350g max (without co	ver)		
OTTILITS	COOLING METHOD		Convection				

- Please contact us about safety approvals for the model with option. Avoid prolonged use under over-load.
- Series/Parallel operation with other model is not possible.
- Derating is required when operated with case cover.



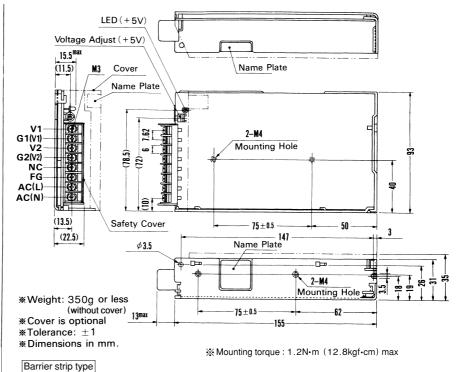
## **External view**



I/O	Connector	Mating Connector
CN1	B3P5-VH	VHR-5N
CN2	B6P-VH	VHR-6N
		(Mfr:J.S.T.)

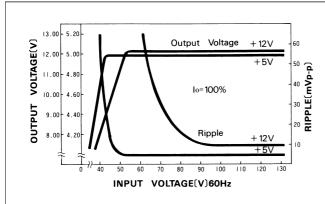
**Terminal** Chain: SVH-21-P1.1 Loose: BVH-21-P1.1 (Mfr:J.S.T.)

Connector type

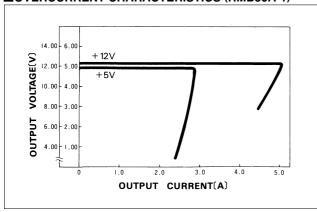


#### Performance data

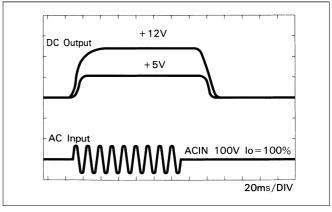
## **■STATIC CHARACTERISTICS (RMB50A-1)**



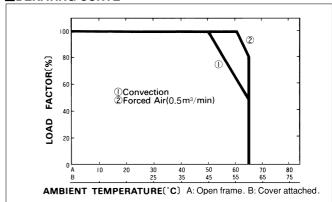
#### ■OVERCURRENT CHARACTERISTICS (RMB50A-1)



#### ■RISE TIME & FALL TIME (RMB50A-1)



#### **■DERATING CURVE**



RMB