COSEL **Unit type**

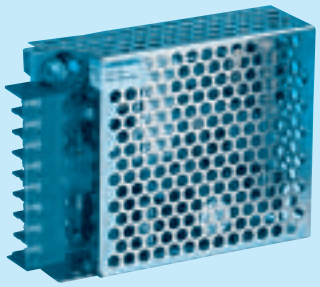
RMB15A

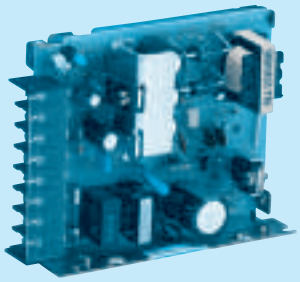
Ordering information

RMB 15A -1 -□

① ② ③ ④

①Series name
②Output wattage
③Output voltage combination
④Optional
J :Connector type
N :with Cover





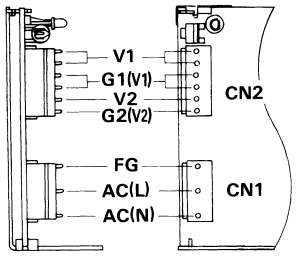
MODEL		RMB15A-1	RMB15A-2
DC OUTPUT	V1	+5V 0.8A	+5V 0.8A
	V2	+12V 1.0(Peak 1.3)A	+24V 0.5(Peak 0.65)A

SPECIFICATIONS

	MODEL		RMB15A-1		RMB15A-2	
INPUT	VOLTAGE[V]		AC85 - 132 1φ or DC110 - 170			
	CURRENT[A]	ACIN 100V	0.45typ (Io=100%)			
	FREQUENCY[Hz]		47 - 440 or DC			
	EFFICIENCY[%]	ACIN 100V	68typ (Io=100%)			
	INRUSH CURRENT[A]	ACIN 100V	20typ (Io=100%) (At cold start)			
OUTPUT	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[mV]		20max	48max	20max	96max
	LOAD REGULATION[mV]		150max	100max	150max	150max
	RIPPLE[mVp-p]	0 to +50℃	100max	120max	100max	120max
		-10 - 0℃	140max	160max	140max	160max
	RIPPLE NOISE[mVp-p]	0 to +50℃	120max	150max	120max	150max
		-10 - 0℃	160max	180max	160max	180max
	TEMPERATURE REGULATION[mV]	0 to +50℃	150max	120max	150max	240max
		-10 to +50℃	180max	150max	180max	290max
	START-UP TIME[ms]		100max (ACIN 85V, Io=100%)			
	HOLD-UP TIME[ms]		10typ (ACIN 85V, Io=100%, 0 to +50℃) 20typ (ACIN 100V, Io=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	OVERCURRENT PROTECTION		Works over 105% of rating (peak current for V2) and recovers automatically			
	OVERVOLTAGE PROTECTION		By zener diode clamping (+5V)			
	OPERATING INDICATION		LED (Green)			
ISOLATION	INPUT-OUTPUT		AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature)			
	INPUT-FG, COVER		AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature)			
	OUTPUT-FG, COVER		AC500V 1minute, DC500V 50MΩmin (At Room Temperature)			
	OUTPUT-OUTPUT(V1-V2)		AC100V 1minute, DC100V 10MΩmin (At Room Temperature)			
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +60℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max			
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max			
	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			
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS		UL60950-1, C-UL Complies with DEN-AN			
	CONDUCTED NOISE		Complies with FCC-B, VCCI-B			
OTHERS	CASE SIZE/WEIGHT		28×80×100mm (W×H×D) /250g max (without cover)			
	COOLING METHOD		Convection			

* 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



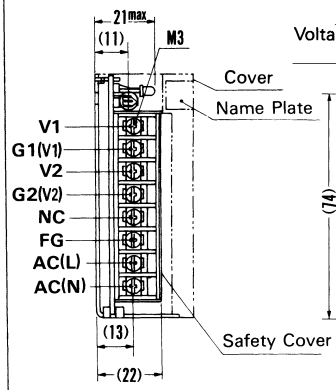
I/O Connector		Mating Connector
CN1	B3P5-VH	VHR-5N
CN2	B6P-VH	VHR-6N

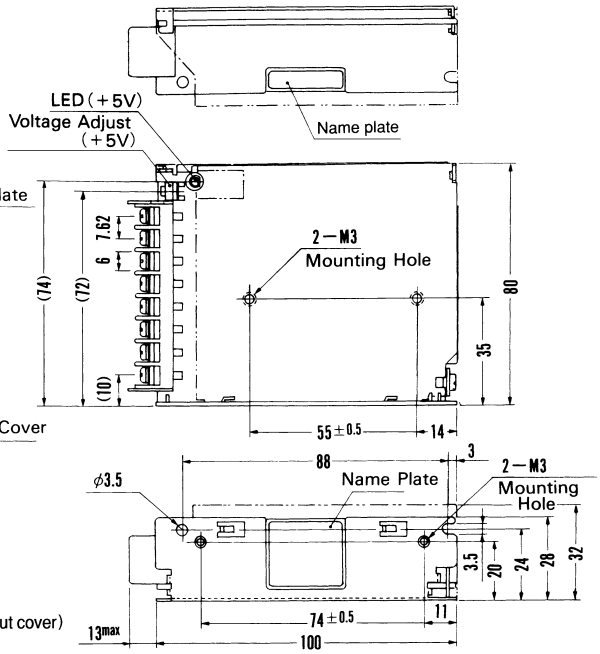
(Mfr:J.S.T.)

Terminal
Chain : SVH-21-P1.1 Loose : BVH-21-P1.1

(Mfr:J.S.T.)

Connector type





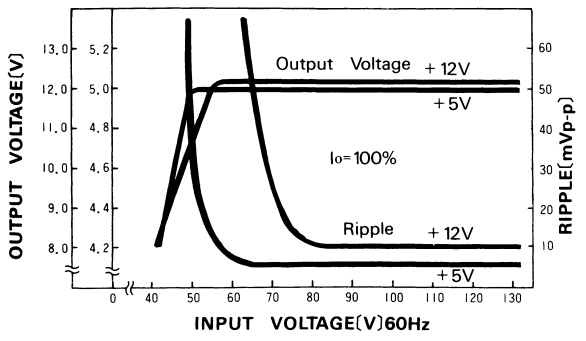
※Weight: 250g or less (without cover)
※Cover is optional
※Tolerance: ±1
※Dimensions in mm.

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

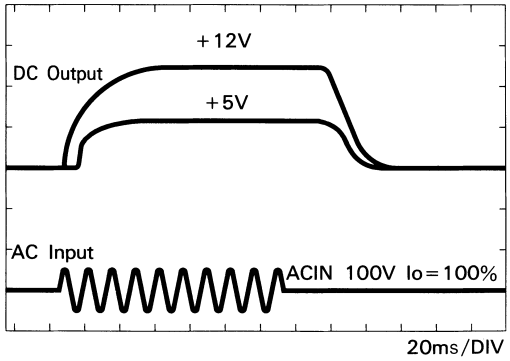
Barrier strip type

Performance data

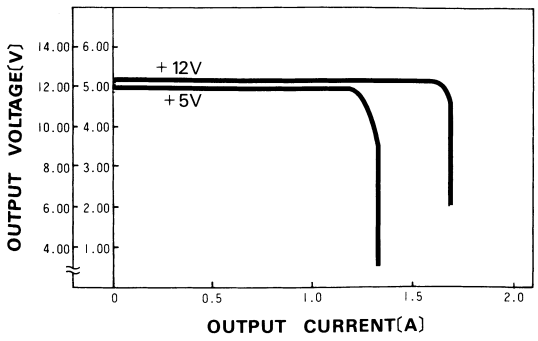
■STATIC CHARACTERISTICS (RMB15A-1)



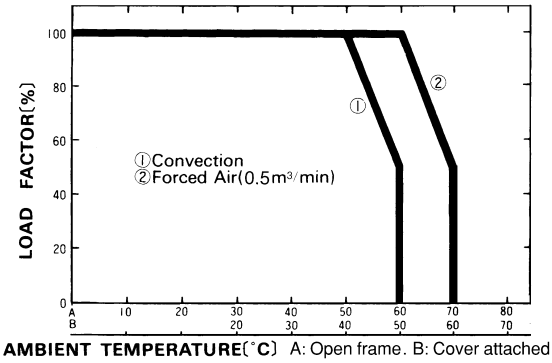
■RISE TIME & FALL TIME (RMB15A-1)



■OVERCURRENT CHARACTERISTICS (RMB15A-1)



■DERATING CURVE



A: Open frame. B: Cover attached

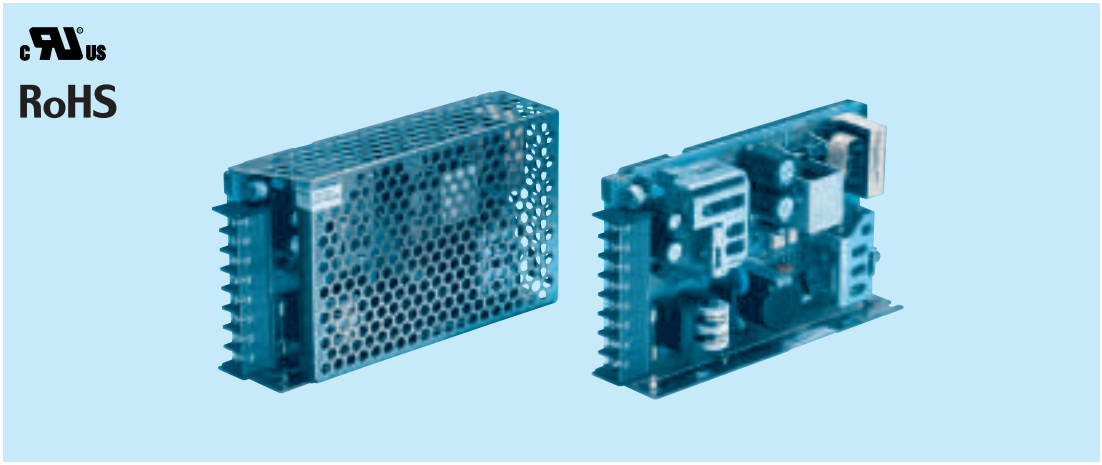
COSEL **Unit type**

RMB30A

Ordering information

RMB 30A -1 -□

① ② ③ ④



①Series name
②Output wattage
③Output voltage combination
④Optional
J :Connector type
N :with Cover

RMB

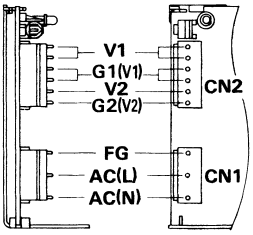
MODEL		RMB30A-1	RMB30A-2
DC OUTPUT	V1	+5V 1.5A	+5V 1.5A
	V2	+12V 2.0(Peak 2.8)A	+24V 1.0(Peak 1.4)A

SPECIFICATIONS

	MODEL		RMB30A-1		RMB30A-2	
INPUT	VOLTAGE[V]		AC85 - 132 1φ or DC110 - 170			
	CURRENT[A]	ACIN 100V	0.9typ (Io=100%)			
	FREQUENCY[Hz]		47 - 440 or DC			
	EFFICIENCY[%]	ACIN 100V	69typ (Io=100%)			
	INRUSH CURRENT[A]	ACIN 100V	30typ (Io=100%) (At cold start)			
OUTPUT	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[mV]		20max	48max	20max	96max
	LOAD REGULATION[mV]		150max	100max	150max	150max
	RIPPLE[mVp-p]	0 to +50℃	100max	120max	100max	120max
		-10 - 0℃	140max	160max	140max	160max
	RIPPLE NOISE[mVp-p]	0 to +50℃	120max	150max	120max	150max
		-10 - 0℃	160max	180max	160max	180max
	TEMPERATURE REGULATION[mV]	0 to +50℃	150max	120max	150max	240max
		-10 to +50℃	180max	150max	180max	290max
	START-UP TIME[ms]		100max (ACIN 85V, Io=100%)			
	HOLD-UP TIME[ms]		10typ (ACIN 85V, Io=100%, 0 to +50℃) 20typ (ACIN 100V, Io=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	OVERCURRENT PROTECTION		Works over 105% of rating (peak current for V2) and recovers automatically			
	OVERVOLTAGE PROTECTION		Works at 115 - 140% of rating (+5V)			
	OPERATING INDICATION		LED (Green)			
ISOLATION	INPUT-OUTPUT		AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature)			
	INPUT-FG, COVER		AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature)			
	OUTPUT-FG, COVER		AC500V 1minute, DC500V 50MΩmin (At Room Temperature)			
	OUTPUT-OUTPUT(V1-V2)		AC100V 1minute, DC100V 10MΩmin (At Room Temperature)			
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +60℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max			
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max			
	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			
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS		UL60950-1, C-UL Complies with DEN-AN			
	CONDUCTED NOISE		Complies with FCC-B, VCCI-B			
OTHERS	CASE SIZE/WEIGHT		31×80×135mm (W×H×D) /350g max (without cover)			
	COOLING METHOD		Convection			

* 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



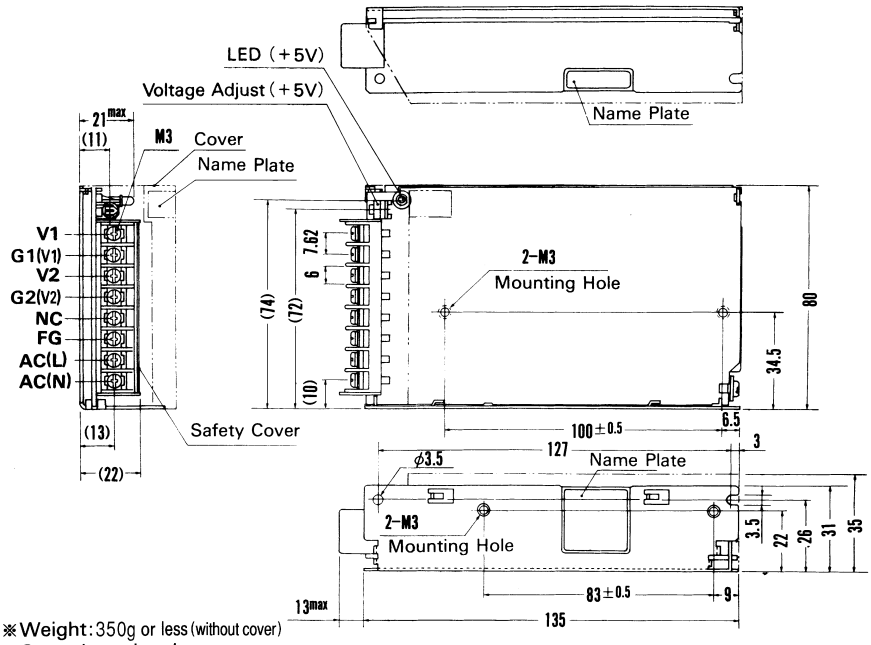
I/O Connector		Mating Connector
CN1	B3P5-VH	VHR-5N
CN2	B6P-VH	VHR-6N

(Mfr:J.S.T.)

Terminal
Chain : SVH-21-P1.1 Loose : BVH-21-P1.1

(Mfr:J.S.T.)

Connector type



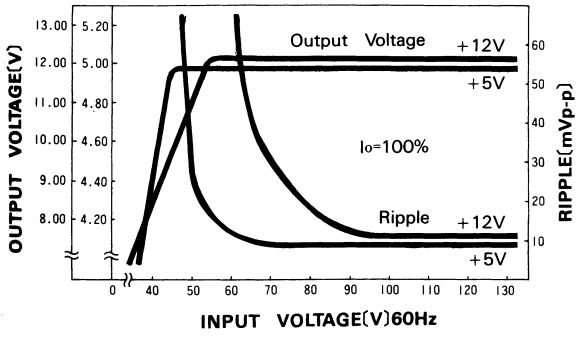
※Weight:350g or less (without cover)
※Cover is optional
※Tolerance: ±1
※Dimensions in mm.

Barrier strip type

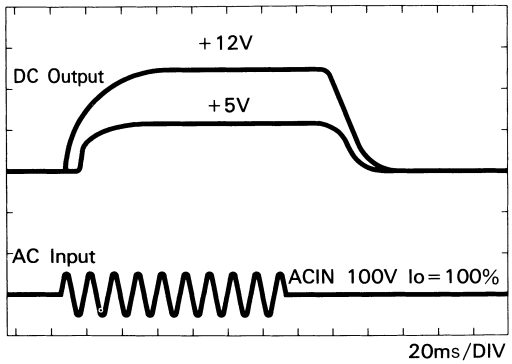
※Mounting torque : 0.6N·m (6.3kgf·cm) max

Performance data

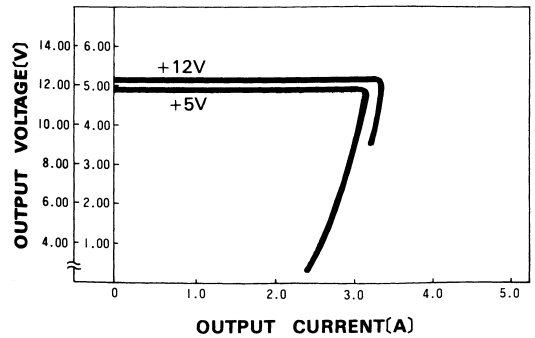
■STATIC CHARACTERISTICS (RMB30A-1)



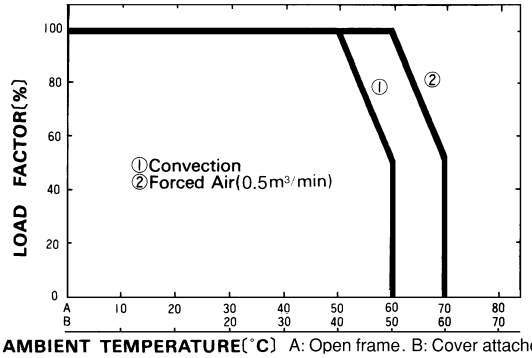
■RISE TIME & FALL TIME (RMB30A-1)



■OVERCURRENT CHARACTERISTICS (RMB30A-1)



■DERATING CURVE



COSEL **Unit type**

RMB50A

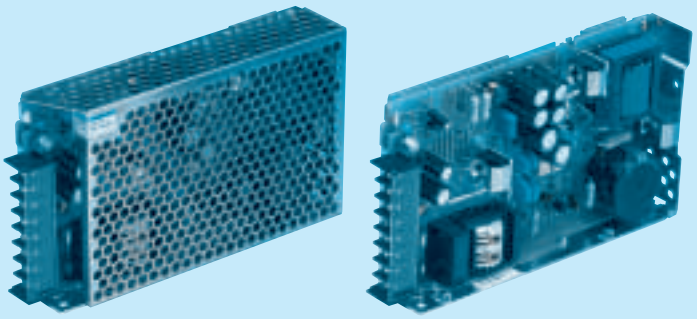
Ordering information

RMB 50A -1 -□

① ② ③ ④

①Series name
②Output wattage
③Output voltage combination
④Optional
G :Low leakage current
J :Connector type
N :with Cover

RMB



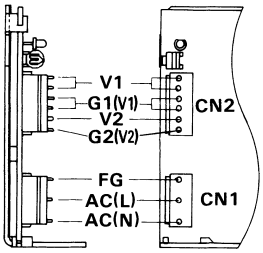
MODEL		RMB50A-1	RMB50A-2
DC OUTPUT	V1	+5V 1.5A	+5V 1.5A
	V2	+12V 3.6(Peak 4)A	+24V 1.8(Peak 2)A

SPECIFICATIONS

	MODEL		RMB50A-1		RMB50A-2	
INPUT	VOLTAGE[V]		AC85 - 132 1φ or DC110 - 170			
	CURRENT[A]	ACIN 100V	1.4typ (Io=100%)			
	FREQUENCY[Hz]		47 - 440 or DC			
	EFFICIENCY[%]	ACIN 100V	74typ (Io=100%)			
	INRUSH CURRENT[A]	ACIN 100V	30typ (Io=100%) (At cold start)			
OUTPUT	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[mV]		20max	48max	20max	96max
	LOAD REGULATION[mV]		150max	100max	150max	150max
	RIPPLE[mVp-p]	0 to +50℃	80max	120max	80max	120max
		-10 - 0℃	140max	160max	140max	160max
	RIPPLE NOISE[mVp-p]	0 to +50℃	120max	150max	120max	150max
		-10 - 0℃	160max	180max	160max	180max
	TEMPERATURE REGULATION[mV]	0 to +50℃	150max	120max	150max	240max
		-10 to +50℃	180max	150max	180max	290max
	START-UP TIME[ms]		100max (ACIN 85V, Io=100%)			
	HOLD-UP TIME[ms]		10typ (ACIN 85V, Io=100%, 0 to +50℃) 20typ (ACIN 100V, Io=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	OVERCURRENT PROTECTION		Works over 105% of rating (peak current for V2) and recovers automatically			
	OVERVOLTAGE PROTECTION		Works at 115 - 140% of rating (+5V)			
	OPERATING INDICATION		LED (Green)			
ISOLATION	INPUT-OUTPUT		AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature)			
	INPUT-FG, COVER		AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature)			
	OUTPUT-FG, COVER		AC500V 1minute, DC500V 50MΩmin (At Room Temperature)			
	OUTPUT-OUTPUT(V1-V2)		AC100V 1minute, DC100V 10MΩmin (At Room Temperature)			
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +65℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max			
	STORAGE TEMP.,HUMID.AND ALTITUDE		-20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max			
	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			
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS		UL60950-1, C-UL Complies with DEN-AN			
	CONDUCTED NOISE		Complies with FCC-B, VCCI-B			
OTHERS	CASE SIZE/WEIGHT		31×93×155mm (W×H×D) /350g max (without cover)			
	COOLING METHOD		Convection			

* 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



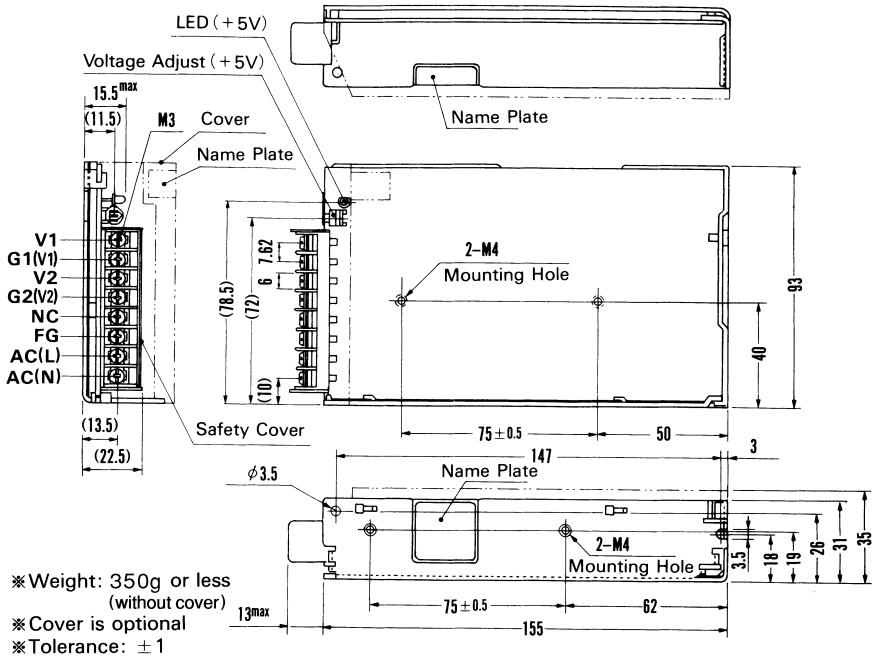
I/O Connector		Mating Connector
CN1	B3P5-VH	VHR-5N
CN2	B6P-VH	VHR-6N

(Mfr:J.S.T.)

Terminal
Chain : SVH-21-P1.1
Loose : BVH-21-P1.1

(Mfr:J.S.T.)

Connector type



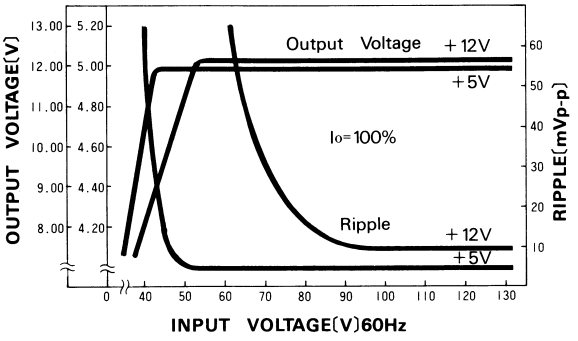
※Weight: 350g or less (without cover)
※Cover is optional
※Tolerance: ±1
※Dimensions in mm.

※Mounting torque : 1.2N·m (12.8kgf·cm) max

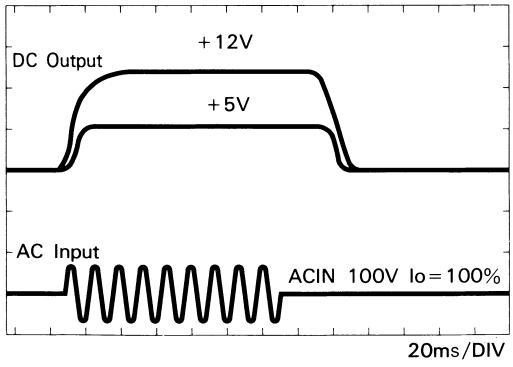
Barrier strip type

Performance data

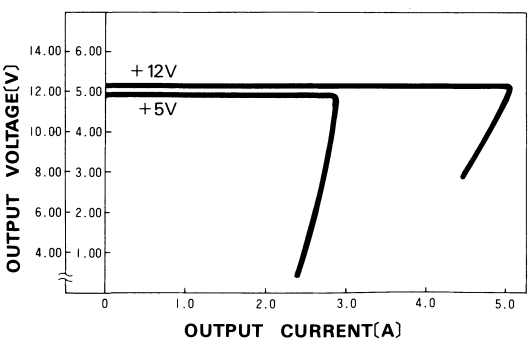
■STATIC CHARACTERISTICS (RMB50A-1)



■RISE TIME & FALL TIME (RMB50A-1)



■OVERCURRENT CHARACTERISTICS (RMB50A-1)



■DERATING CURVE