

Wide input, compact and device-embedded type

TDK Switching Power Supply

J SERIES JBW

UL/CSA, EN60950 approved and Electric Appliances And Material Control Law compliant, CE marking product

(3-year warranty period)

[FEATURES]

- Compact and low price.
- Wide input voltage range type.
- Safety standards approved and Electric Appliances And Material Control Law compliant.
- Corresponds to products with CE marking.
- Full lineup of output power 10 to 50W
- Open frame
- Noise terminal voltage FCC Class B satisfied.
- Warranty period: 3 years
- Specific bromine inflammable materials (PBDPEs, PBBs) are not included in use.

[APPLICATIONS]

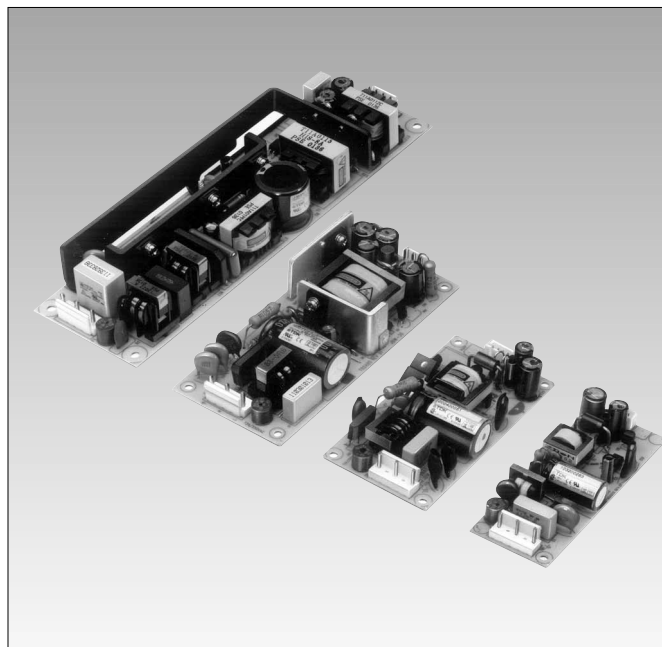
Measuring equipment, robotics, automation equipment, information processing equipment, security systems, amusement equipment, etc.

[SAFETY STANDARDS]

UL1950, CSA950-95, EN60950 approved, and Electric Appliances And Material Control Law compliant.

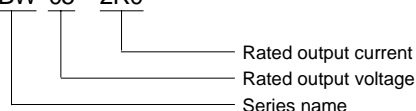
[EMC REGULATIONS]

FCC Class-B, VCCI Class-B, EN-55011-B and EN55022-B compliant.



[PRODUCT IDENTIFICATION]

JBW 05 – 2R0



PART NUMBERS AND RATINGS

Output voltage (V)	10W Type		15W Type		30W Type		50W Type	
	Current(A)	Part No.	Current(A)	Part No.	Current(A)	Part No.	Current(A)	Part No.
5	2	JBW05-2R0	3	JBW05-3R0	6	JBW05-6R0	10	JBW05-10R
12	0.9	JBW12-0R9	1.3	JBW12-1R3	2.5	JBW12-2R5	4.3	JBW12-4R3
15	0.7	JBW15-0R7	1.0	JBW15-1R0	2	JBW15-2R0	3.5	JBW15-3R5
24	0.5	JBW24-0R5	0.7	JBW24-0R7	1.3	JBW24-1R3	2.1	JBW24-2R1

■: Stock products.

• For the product of 50W minimum output voltage, please order JAW Series compliant with Harmonics current requirement .

J SERIES JBW10W TYPE

UL/CSA, EN60950 approved and Electric Appliances And Material Control Law compliant, CE marking product

SPECIFICATIONS AND STANDARDS

PART NO.	JBW05-2R0	JBW12-0R9	JBW15-0R7	JBW24-0R5
Rated output voltage and current*1	5V • 2A	12V • 0.9A	15V • 0.7A	24V • 0.5A
Maximum output power	W	10	10.8	10.5
				12

INPUT CONDITIONS

Input voltage Eac/Edc	V	85 to 265[Rating: 100 to 240]/110 to 370			
Input frequency	Hz	47 to 440[Rating: 50 to 60](Single phase)			
Input current	A	0.25typ./0.35max. [AC.100V]0.15typ./0.25max.[AC.240V]			
Fuse rating	A	2[AC.250V, built-in]			
Surge current	A	15typ.(20max.)[AC.100V]30typ.(40max.)[AC.240V] 1st surge current, cold start, reset after 1s minimum.			
Leakage current	mA	0.1typ./0.75max.[AC.100V, 60Hz]0.15typ./0.75max.[AC.240V, 60Hz]			
Power factor		0.6typ./0.45typ.[AC.100/240V]			
Efficiency	%	100V	71typ.	78typ.	79typ.
	%	240V	71typ.	79typ.	80typ.
					82typ.
					83typ.

OUTPUT CHARACTERISTICS

Output voltage Edc	V	5	12	15	24
Voltage variable range Edc	V	Fixed	Fixed	Fixed	Fixed
Maximum output current	A	2	0.9	0.7	0.5
Minimum output current	A	0	0	0	0
Overvoltage threshold Edc	V	5.75min.	13.8min.	17.25min.	27.6min.
Overcurrent threshold	A	2.5min.	1.12min.	0.87min.	0.62min.
Voltage stability	Input variation	%	0.4max.[Within the input voltage range]		
	Load variation	%	0.8max.[0 to 100% load]		
	Temperature variation	%	1max.[Ambient temperature: -10 to +50°C]		
	Drift	%	0.4max.[25°C, input and output ratings, after input voltage ON for 30min to 8h]		
	Dynamic load	%	±4max.[50 to 100% sudden load change]		
Ripple Ep-p	mV	80max.	120max.	120max.	120max.
Ripple noise Ep-p	mV	120max.	150max.	150max.	150max.
Start up time	ms	700max.(200typ.)/700max.(200typ.) [AC.100/240V]			
Hold up time	ms	15typ/140typ [AC.100/240V]			

AUXILIARY FUNCTIONS

Indicator display	No
Overvoltage protection	Zenor diode clamp method, output may latch up depending on the condition.
Overcurrent protection	Fixed current and voltage threshold type, automatic recovery.
Remote ON-OFF	No
Remote sensing	No
Parallel operation	No
Series operation	Yes
Output voltage external variable function	No

STANDARDS

Safety standards	UL1950, CSA950-95, EN60950 approved, Electrical Appliance And Material Control Low compliant.
Noise terminal voltage	FCC-B, VCCI-B, EN55011-B, EN55022-B compliant.
Input harmonics current requirement	No

CONSTRUCTIONS

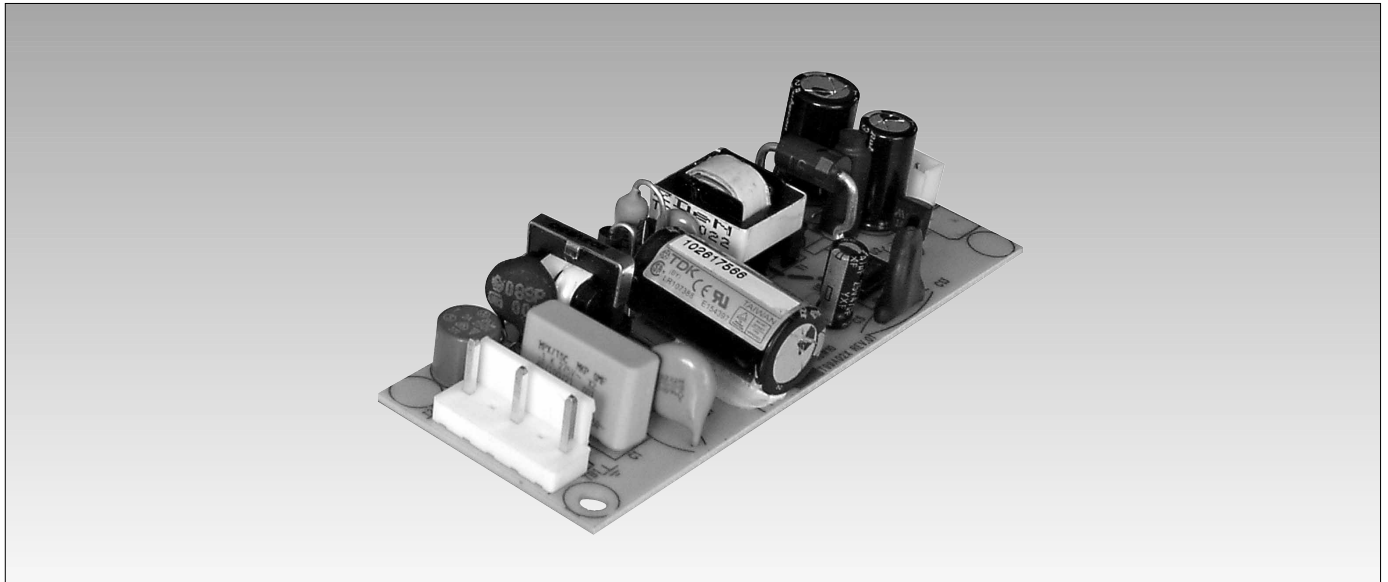
External dimensions	mm	21×36×95[H×W×L]
Weight	g	50max.
Mounting method		Can be attached to 1 side.
Case material		No(PWB Material CEM3)

*1 Current rating(maximum output current) is determined for -10 to +50°C. Derating is required when used outside this temperature range.

• Optional input, output cable kits are available at a separate price.

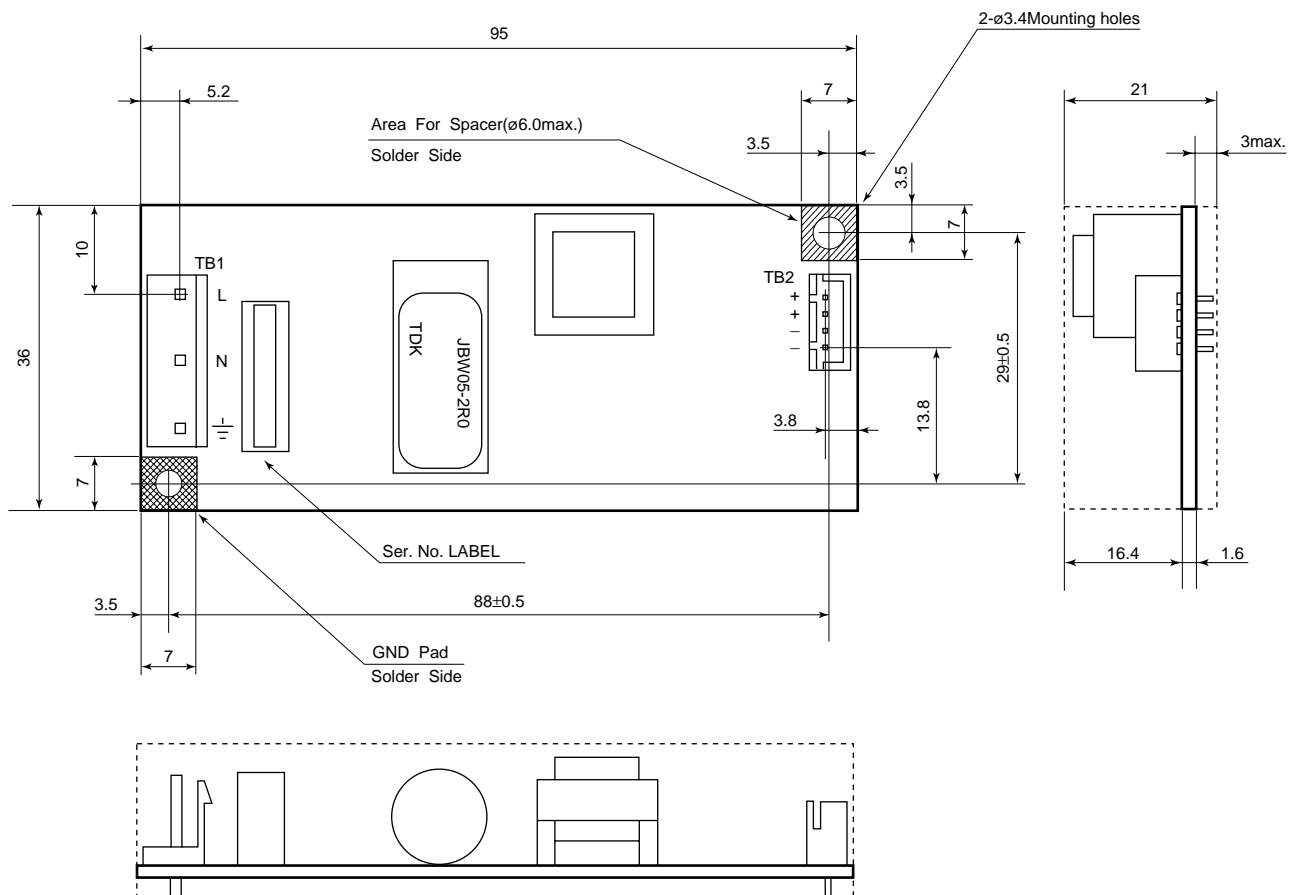
J SERIES JBW10W TYPE

UL/CSA, EN60950 approved and Electric Appliances And Material Control Law compliant, CE marking product



SHAPES AND DIMENSIONS JBW10W TYPE

Dimensions in mm
±1mm : without specified dimensions



J SERIES JBW15W TYPE

UL/CSA, EN60950 approved and Electric Appliances And Material Control Law compliant, CE marking product

SPECIFICATIONS AND STANDARDS

PART NO.	JBW05-3R0	JBW12-1R3	JBW15-1R0	JAW24-0R7
Rated output voltage and current*1	5V • 3A	12V • 1.3A	15V • 1.0A	24V • 0.7A
Maximum output power	W	15	15.6	15
				16.8

INPUT CONDITIONS

Input voltage Eac/Edc	V	85 to 265[Rating: 100 to 240]/110 to 370			
Input frequency	Hz	47 to 440[Rating: 50 to 60](Single phase)			
Input current	A	0.36typ./0.43max.[AC.100V]0.20typ./0.24max.[AC.240V]			
Fuse rating	A	2[AC.250V, built-in]			
Surge current	A	15typ./19.5max.[AC.100V]30typ./41max.[AC.240V] 1st surge current, cold start, reset after 1s minimum.			
Leakage current	mA	0.2typ./0.75max.[AC.100V, 60Hz]0.3typ./0.75max.[AC.240V, 60Hz]			
Power factor		0.6typ./0.45typ.[AC.100/240V]			
Efficiency	%	100V	72typ.	76typ.	78typ.
	%	240V	72typ.	74typ.	76typ.

OUTPUT CHARACTERISTICS

Output voltage Edc	V	5	12	15	24
Voltage variable range Edc	V	Fixed	Fixed	Fixed	Fixed
Maximum output current	A	3	1.3	1	0.7
Minimum output current	A	0	0	0	0
Overvoltage threshold Edc	V	5.75min.	13.8min.	17.25min.	27.6min.
Overcurrent threshold	A	3.15min.	1.37min.	1.05min.	0.74min.
Voltage stability	Input variation	%	0.4max.[Within the input voltage range]		
	Load variation	%	0.8max.[0 to 100% load]		
	Temperature variation	%	1max.[Ambient temperature: -10 to +50°C]		
	Drift	%	0.4max.[25°C, input and output ratings, after input voltage ON for 30min to 8h]		
	Dynamic load	%	±4max.[50 to 100% sudden load change]		
Ripple Ep-p	mV	80max.	120max.	120max.	120max.
Ripple noise Ep-p	mV	120max.	150max.	150max.	150max.
Start up time	ms	200max.(25typ.)/100max.(25typ.)[AC.100/240V]			
Hold up time	ms	13typ./150typ. [AC.100/240V]			

AUXILIARY FUNCTIONS

Indicator display	No
Overvoltage protection	Zenor diode clamp method, output may latch up depending on the condition.
Overcurrent protection	Fixed current and voltage threshold type, automatic recovery.
Remote ON-OFF	No
Remote sensing	No
Parallel operation	No
Series operation	Yes
Output voltage external variable function	No

STANDARDS

Safety standards	UL1950, CSA950-95, EN60950 approved, Electrical Appliance And Material Control Low compliant.
Noise terminal voltage	FCC-B, VCCI-B, EN55011-B, EN55022-B compliant.
Input harmonics current requirement	No

CONSTRUCTIONS

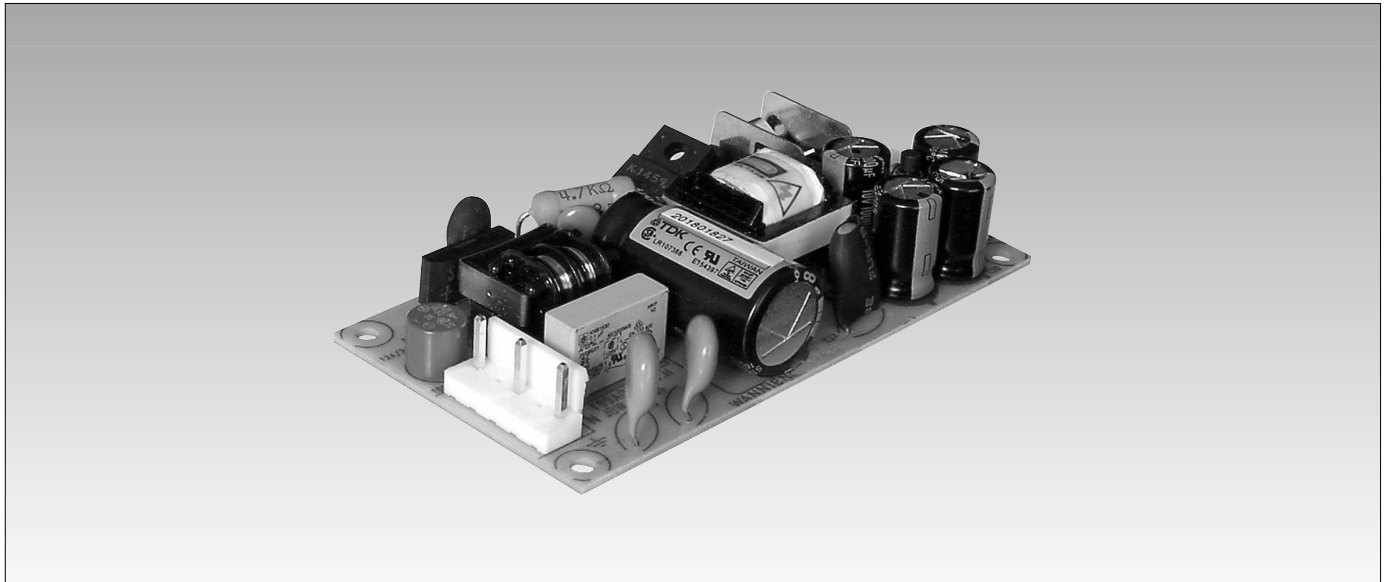
External dimensions	mm	22.6×50×95[H×W×L]
Weight	g	80max.
Mounting method		Can be attached to 1 side.
Case material		No(PWB Material CEM3)

*1 Current rating(maximum output current) is determined for -10 to +50°C. Derating is required when used outside this temperature range.

• Optional input, output cable kits are available at a separate price.

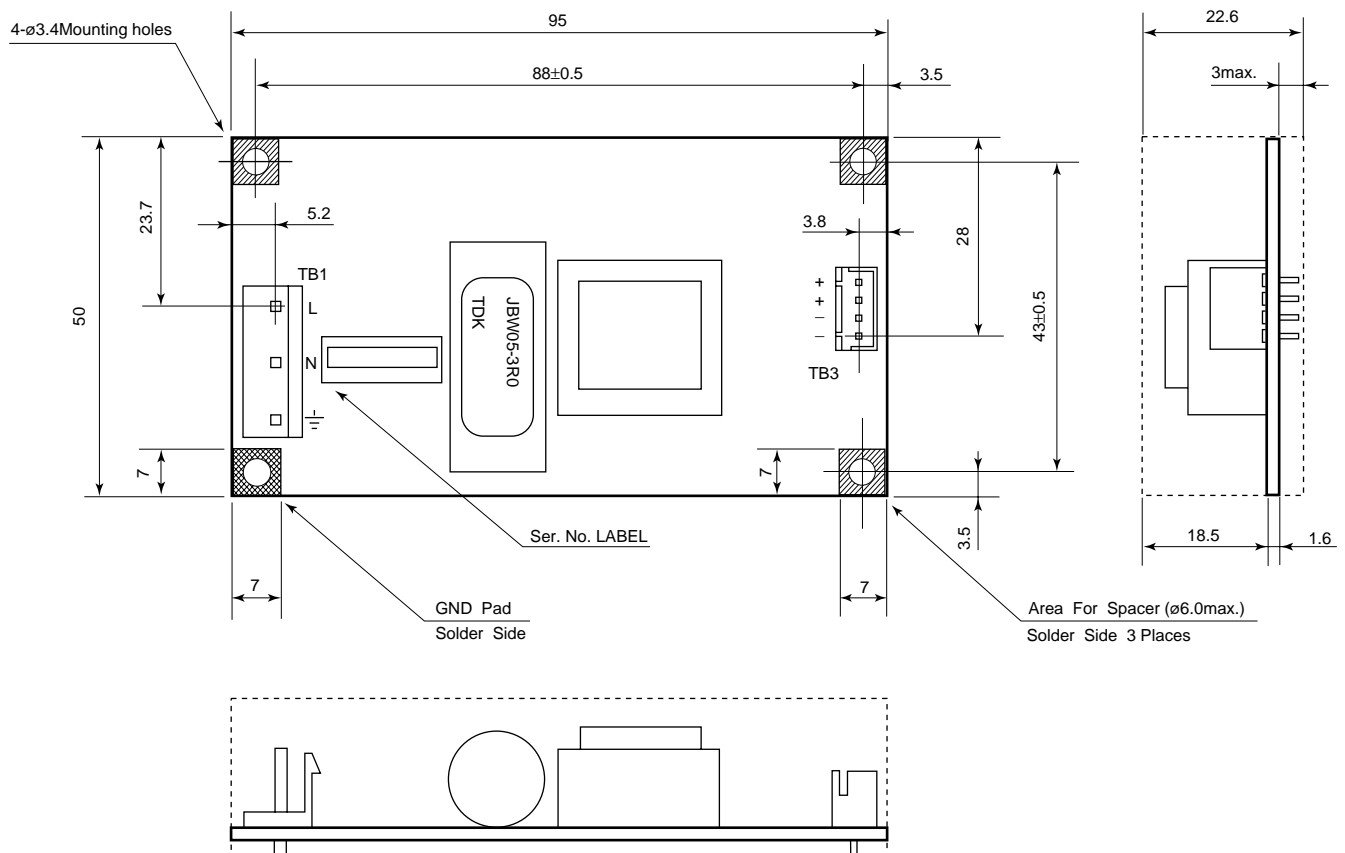
J SERIES JBW15W TYPE

UL/CSA, EN60950 approved and Electric Appliances And Material Control Law compliant, CE marking product



SHAPES AND DIMENSIONS JBW15W TYPE

Dimensions in mm
±1mm : without specified dimensions



J SERIES JBW30W TYPE

UL/CSA, EN60950 approved and Electric Appliances And Material Control Law compliant, CE marking product

SPECIFICATIONS AND STANDARDS

PART NO.	JBW05-6R0	JBW12-2R5	JBW15-2R0	JAW24-1R3
Rated output voltage and current*1	5V • 6A	12V • 2.5A	15V • 2A	24V • 1.3A
Maximum output power	W	30	30	31.2

INPUT CONDITIONS

Input voltage Eac/Edc	V	85 to 265[Rating: 100 to 240]/110 to 370				
Input frequency	Hz	47 to 440[Rating: 50 to 60](Single phase)				
Input current	A	0.65typ./0.86max.[AC.100V]0.35typ./0.48max.[AC.240V]				
Fuse rating	A	2[AC.250V, built-in]				
Surge current	A	15typ./30max.[AC.100V]30typ./60max.[AC.240V] 1st surge current, cold start, reset after 1s minimum.				
Leakage current	mA	0.35typ./0.75max.[AC.100V, 60Hz]0.5typ./0.75max.[AC.240V, 60Hz]				
Power factor		0.6typ./0.45typ.[AC.100/240V]				
Efficiency	%	100V	75typ.	78typ.	79typ.	80typ.
	%	240V	77typ.	79typ.	80typ.	81typ.

OUTPUT CHARACTERISTICS

Output voltage Edc	V	5	12	15	24
Voltage variable range Edc	V	Fixed	Fixed	Fixed	Fixed
Maximum output current	A	6	2.5	2	1.3
Minimum output current	A	0	0	0	0
Overvoltage threshold Edc	V	5.6min.	13.3min.	16.6min.	26.5min.
Overcurrent threshold	A	6.3min.	2.7min.	2.1min.	1.4min.
Voltage stability	Input variation	%	0.4max.[Within the input voltage range]		
	Load variation	%	0.8max.[0 to 100% load]		
	Temperature variation	%	2max.[Ambient temperature: -10 to +50°C]		
	Drift	%	0.4max.[25°C, input and output ratings, after input voltage ON for 30min to 8h]		
	Dynamic load	%	±4max.[50 to 100% sudden load change]		
Ripple Ep-p	mV	80max.	120max.	120max.	120max.
Ripple noise Ep-p	mV	120max.	150max.	150max.	150max.
Start up time	ms	900max.(700typ.)/450max.(260typ.)[AC.100/240V]			
Hold up time	ms	20typ./160typ.[AC.100/240V]			

AUXILIARY FUNCTIONS

Indicator display	No
Overvoltage protection	Voltage shut-down type.
Overcurrent protection	Fixed current and voltage threshold type, automatic recovery.
Remote ON-OFF	No
Remote sensing	No
Parallel operation	No
Series operation	Yes
Output voltage external variable function	No

STANDARDS

Safety standards	UL1950, CSA950-95, EN60950 approved, Electrical Appliance And Material Control Low compliant.
Noise terminal voltage	FCC-B, VCCI-B, EN55011-B, EN55022-B compliant.
Input harmonics current requirement	No

CONSTRUCTIONS

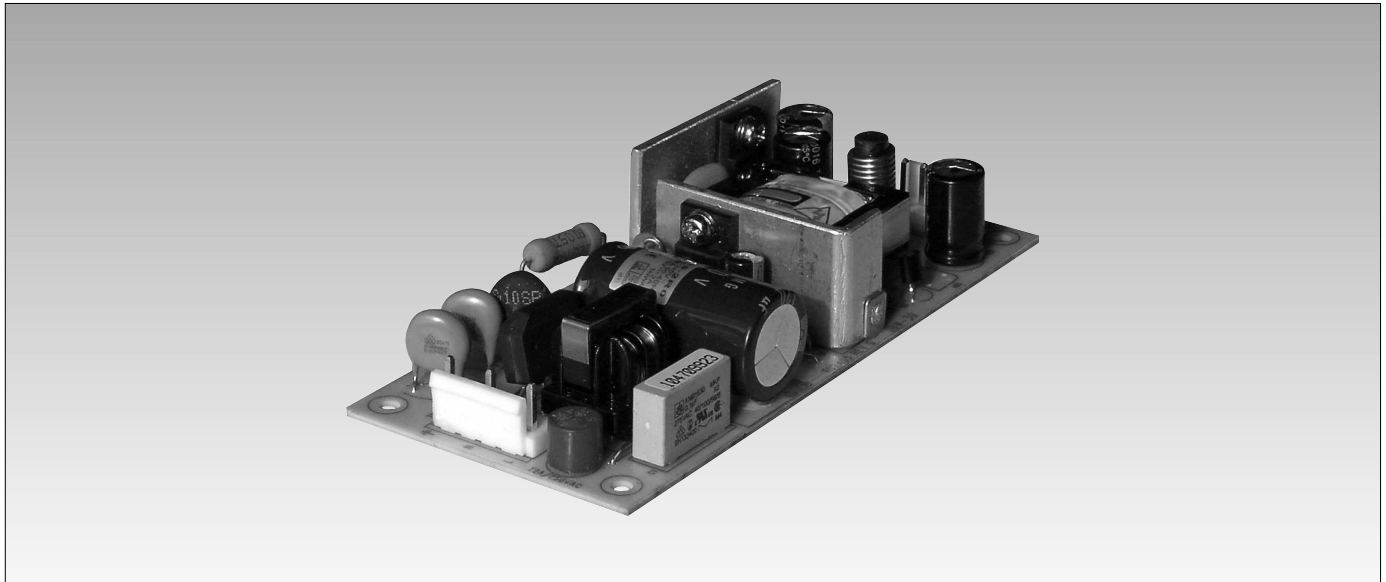
External dimensions	mm	26×55×122[H×W×L]
Weight	g	150max.
Mounting method		Can be attached to 1 side.
Case material		No(PWB Material CEM3)

*1 Current rating(maximum output current) is determined for -10 to +50°C. Derating is required when used outside this temperature range.

• Optional input, output cable kits are available at a separate price.

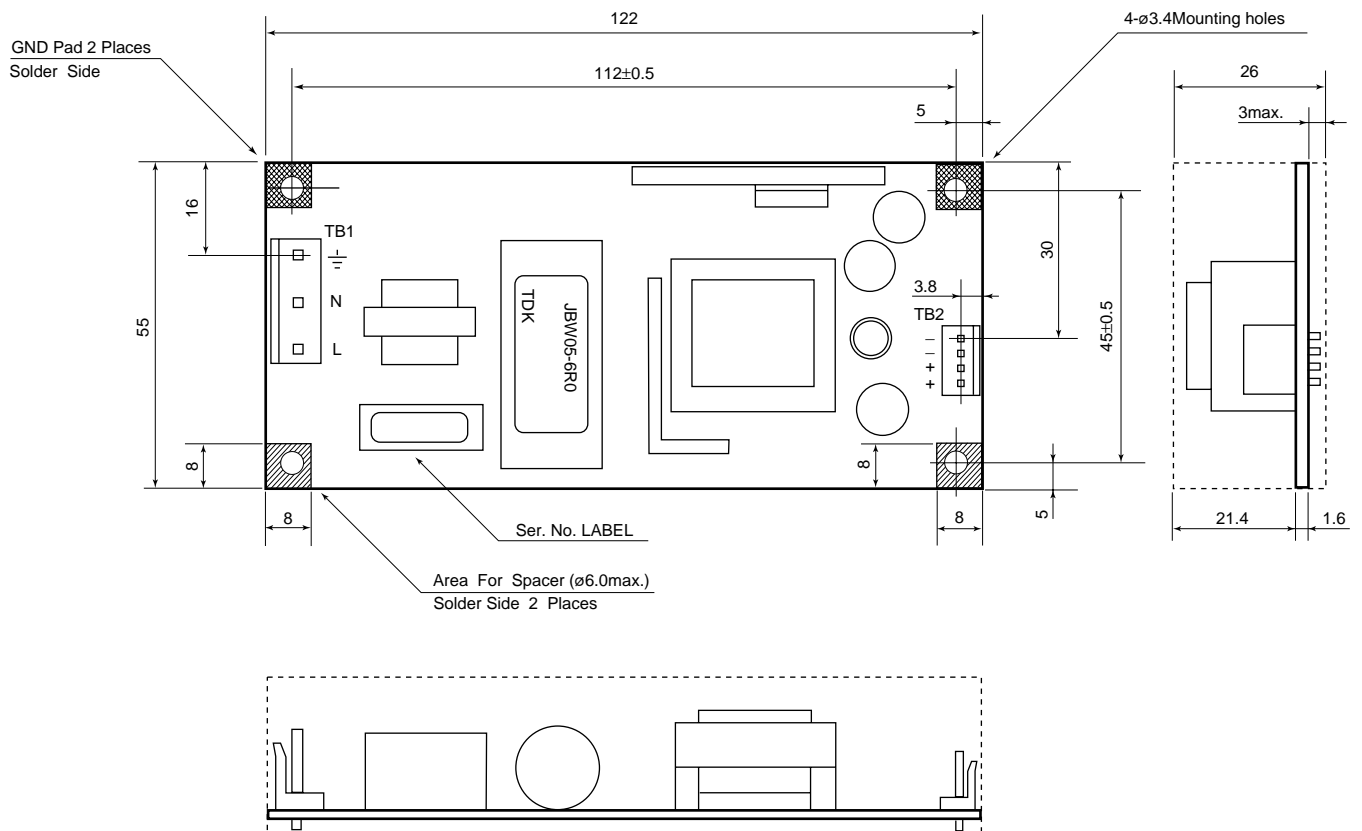
J SERIES JBW30W TYPE

UL/CSA, EN60950 approved and Electric Appliances And Material Control Law compliant, CE marking product



SHAPES AND DIMENSIONS JBW30W TYPE

Dimensions in mm
±1mm : without specified dimensions



J SERIES JBW50W TYPE

UL/CSA, EN60950 approved and Electric Appliances And Material Control Law compliant, CE marking product

SPECIFICATIONS AND STANDARDS

PART NO.	JBW05-10R	JBW12-4R3	JBW15-3R5	JBW24-2R1
Rated output voltage and current*1	5V • 10A	12V • 4.3A	15V • 3.5A	24V • 2.1A
Maximum output power	W	50	51.6	52.5

INPUT CONDITIONS

Input voltage Eac/Edc*2	V	85 to 265[Rating: 100 to 240]/120 to 375			
Input frequency	Hz	47 to 66[Rating: 50 to 60](Single phase)			
Input current	A	0.7typ./0.88max. [AC.100V]0.35typ./0.5max.[AC.240V]			
Fuse rating	A	3.15[AC.250V, built-in]			
Surge current	A	15typ.(30max.)[AC.100V]40typ.(60max.)[AC.240V] cold start			
Leakage current	mA	0.35typ./0.75max.[AC.100V, 60Hz]0.5typ./0.75max.[AC.240V, 60Hz]			
Power factor		0.99typ./0.93typ.[AC.100/240V]			
Efficiency	% 100V	77typ.	80typ.	80typ.	81typ.
	% 240V	79typ.	81typ.	81typ.	83typ.

OUTPUT CHARACTERISTICS

Output voltage Edc	V	5	12	15	24
Voltage variable range Edc*3	V	Fixed	Fixed	Fixed	Fixed
Maximum output current	A	10	4.3	3.5	2.1
Minimum output current	A	0	0	0	0
Overvoltage threshold Edc	V	5.75 to 6.9	13.8 to 16.8	17.2 to 21	27.6 to 33.6
Overcurrent threshold	A	10.5min.	5.4min.	4.4min.	2.7min.
Voltage stability	Input variation	%	0.4max.[Within the input voltage range]		
	Load variation	%	0.8max.[0 to 100% load]		
	Temperature variation	%	1max.[Ambient temperature: -10 to +50°C]		
	Drift	%	0.4max.[25°C, input and output ratings, after input voltage ON for 30min to 8h]		
	Dynamic load	%	±4max.[50 to 100% sudden load change]		
Ripple Ep-p	mV	80max.	120max.	120max.	120max.
Ripple noise Ep-p	mV	120max.	150max.	150max.	150max.
Start up time	ms	500max.(400typ.)/500max.(400typ.) [AC.100/240V]			
Hold up time	ms	20typ./20typ. [AC.100/240V]			

AUXILIARY FUNCTIONS

Indicator display	No
Overvoltage protection	Voltage shut-down type.
Overcurrent protection	Fixed current and voltage threshold type, automatic recovery.
Remote ON-OFF	No
Remote sensing	No
Parallel operation	No
Series operation	Yes
Output voltage external variable function	No

STANDARDS

Safety standards	UL1950, CSA950-95, EN60950 approved, Electrical Appliance And Material Control Low compliant.
Noise terminal voltage	FCC-B, VCCI-B, EN55011-B, EN55022-B compliant.
Input harmonics current requirement	EN61000-3-2 compliant

CONSTRUCTIONS

External dimensions	mm	26×55×190[H×W×L]
Weight	g	220max.
Mounting method		Can be attached to 1 side.
Case material		No(PWB Material CEM3)

*1 Current rating(maximum output current) is determined for -10 to +50°C. Derating is required when used outside this temperature range.

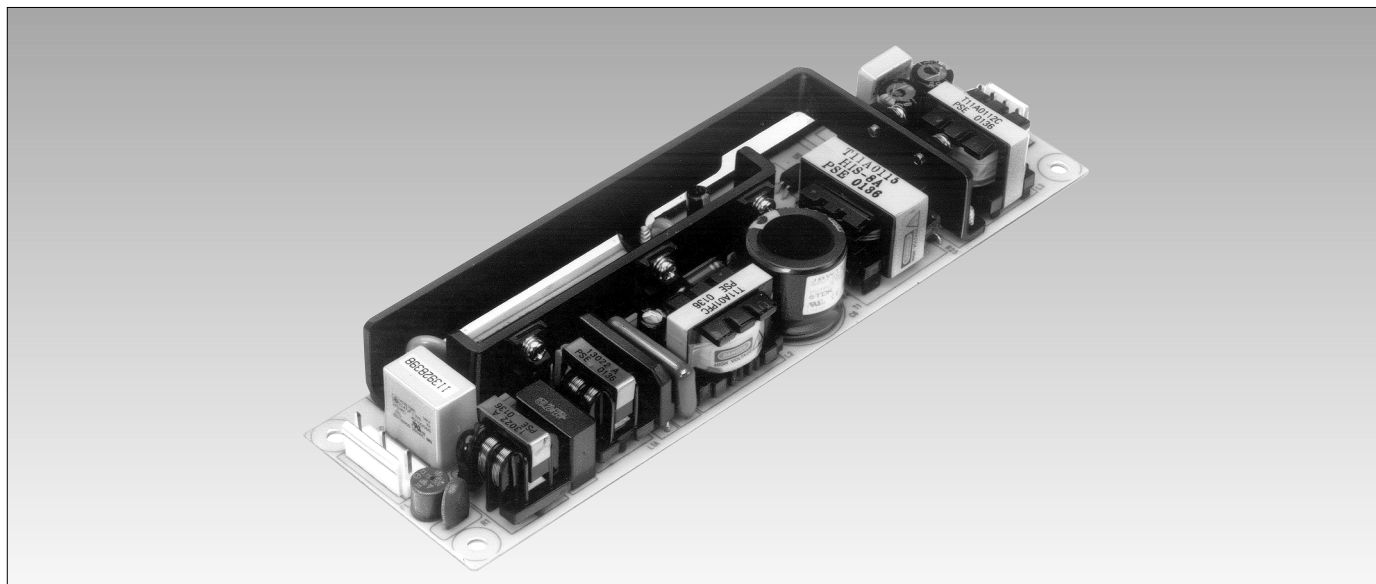
*2 Please note that the deterioration of parts is occasionally caused when operating for a long time(over 10 minutes) with the voltage below the range of the input voltage.

*3 Please contact us when the output voltage external variable function is necessary.

• Optional input, output cable kits are available at a separate price.

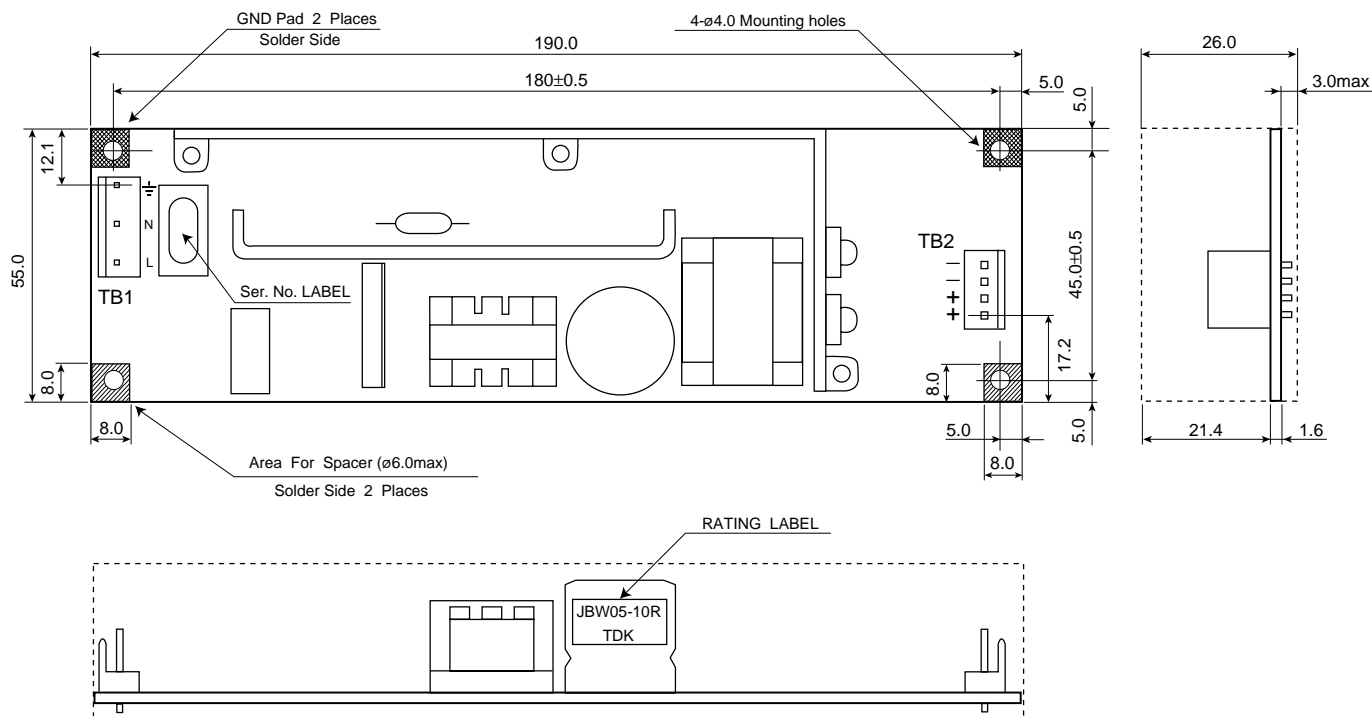
J SERIES JBW50W TYPE

UL/CSA, EN60950 approved and Electric Appliances And Material Control Law compliant, CE marking product



SHAPES AND DIMENSIONS JBW50W TYPE

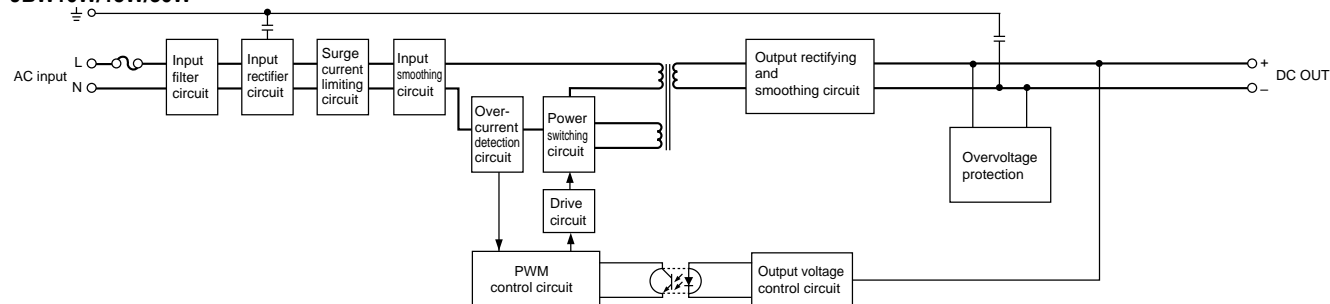
Dimensions in mm
±1mm : without specified dimensions



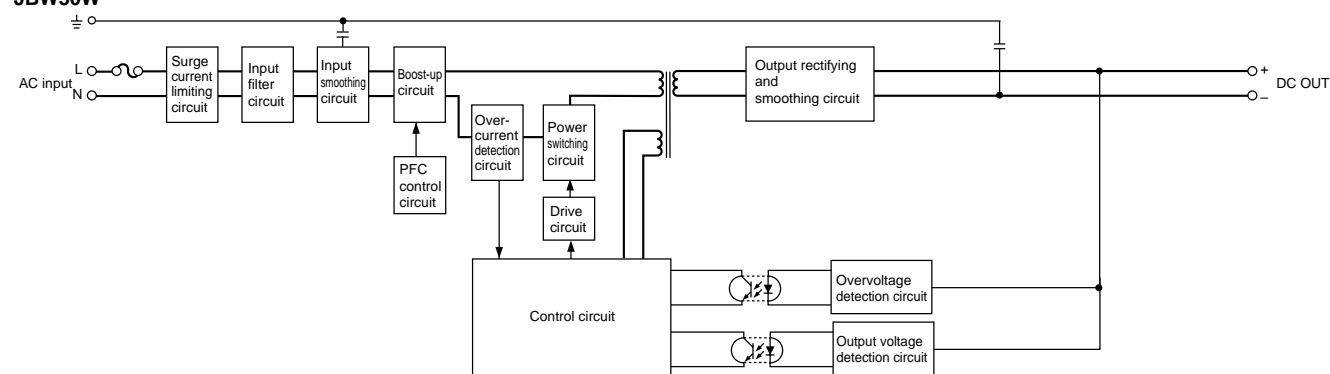
Characteristics, Functions, and Applications

BLOCK DIAGRAMS

JBW10W/15W/30W



JBW50W



COMMON SPECIFICATIONS

Temperature and humidity

Temperature range	Operating(°C)	-10 to +60
	Operating available(°C)	-20 to -10
	Storage(°C)	-30 to +75
Humidity range	Operating(%)RH	20 to 95[Maximum wet-bulb temperature: 35°C, without dewing]
	Storage(%)RH	

Amplitude and vibration

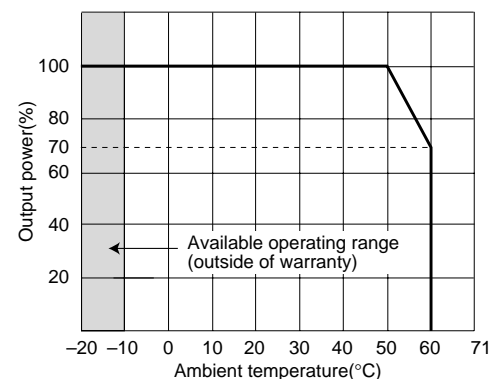
Amplitude	5 to 10Hz	All amplitude 10mm[3 directions, each 1h]
	10 to 200Hz	Acceleration 19.6m/s ² [2G, 3 directions, each 1h]
Vibration	Acceleration	588m/s ² [60G, 3 directions, each 3 times]
	Vibration time	11±5ms

Withstand voltage and insulation resistance

Withstand voltage	Input terminal to ground terminal(\perp)	Eac(kV)2, 1min[Normal temperature, normal humidity, cutout current 10mA]
	Input terminal to output terminal	Eac(kV)3, 1min[Normal temperature, normal humidity, cutout current 10mA]
	Output terminal to ground terminal(\perp)	Eac(V)500, 1min[Normal temperature, normal humidity, cutout current 10mA]
Insulation resistance	Input terminal to ground terminal(\perp)	Eac(V)500, 100M Ω min.(Normal temperature, normal humidity)
	Input terminal to output terminal	
	Output terminal to ground terminal(\perp)	

OUTPUT POWER-AMBIENT TEMPERATURE(DERATINGS)

JBW10W/15W/30W/50W



All specifications are subject to change without notice.

Characteristics, Functions, and Applications

TERMINAL DESIGNATIONS

JBW10W

TB1

P1	L
P2	N
P3	\perp



TB2

P4	+
P3	
P2	-
P1	

- 1 Input terminal(L)
- 2 Input terminal(N)
- 3 Frame ground terminal(\perp)
- 4 Ground pad
- 5 Output terminal(-)
- 6 Output terminal(+)

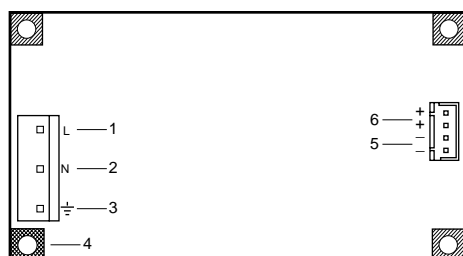
Connector made by Japan Solderless Terminal Co., Ltd.	Power supply side connector	Cable Side	
		Housing	Terminal
Input Connector(TB1) VH Series	B3P5-VH-B	VHR-5N	SVH-21T-P1.1
Output Connector(TB2) XH Series	B4B-XH-2	XHP-4	SXH-001T-P0.6

Option	Part No.
Input	4EU00G056
Output	4EU10G054
Set	4EU20G054

JBW15W

TB1

P1	L
P2	N
P3	\perp



TB3

P4	+
P3	
P2	-
P1	

Connector made by Japan Solderless Terminal Co., Ltd.	Power supply side connector	Cable Side	
		Housing	Terminal
Input Connector(TB1) VH Series	B3P5-VH-B	VHR-5N	SVH-21T-P1.1
Output Connector(TB3) XH Series	B4B-XH-2	XHP-4	SXH-001T-P0.6

Option	Part No.
Input	4EU00G056
Output	4EU10G054
Set	4EU20G054

JBW30W

TB1

P3	\perp
P2	N
P1	L



TB2

P1	-
P2	
P3	+
P4	

Connector made by Japan Solderless Terminal Co., Ltd.	Power supply side connector	Cable Side	
		Housing	Terminal
Input Connector(TB1) VH Series	B3P5-VH-B	VHR-5N	SVH-21T-P1.1
Output Connector(TB2) VH Series	B4B-VH-B	VHR-4N	SVH-21T-P1.1

Option	Part No.
Input	4EU00G056
Output	4EU10G057
Set	4EU20G057

JBW50W

TB1

P3	\perp
P2	N
P1	L



TB2

P1	-
P2	
P3	+
P4	

Connector made by Japan Solderless Terminal Co., Ltd.	Power supply side connector	Cable Side	
		Housing	Terminal
Input Connector(TB1) VH Series	B3P5-VH-B	VHR-5N	SVH-21T-P1.1
Output Connector(TB2) VH Series	B4B-VH-B	VHR-4N	SVH-21T-P1.1

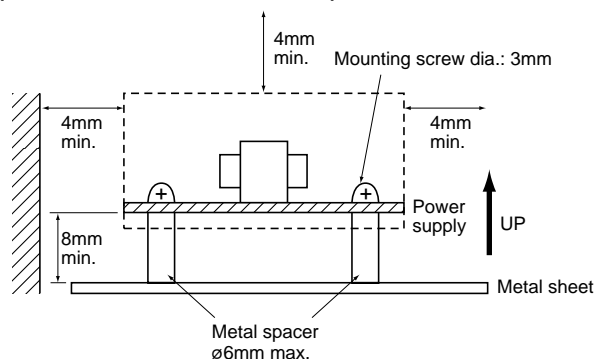
Option	Part No.
Input	4EU00G056
Output	4EU10G057
Set	4EU20G057

Characteristics, Functions, and Applications

INSTALLATION

- 1) Fix the power supply at the four corners with metal spacers (2 corners for 10W models).
- 2) Maintain a min. 4mm clearance distance in order to satisfy insulation and high voltage safety requirements.
- 3) Lay an insulating sheet under the power supply in case a min. 8mm installation space cannot be secured between the PC board and the metal sheet.
- 4) Provide a min. 4mm distance between heat sink or component surface and surrounding objects in order to cause a thermal convection.
- 5) Since components are mounted on the back (solder) side of the product, sufficient care should be taken when handling the power supply to protect the PC board from shock, vibration, torsion, etc. which can result in damage caused by cracked chip components.

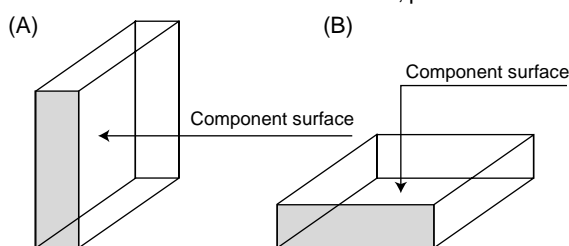
(Standard installation direction)



(Installation direction)

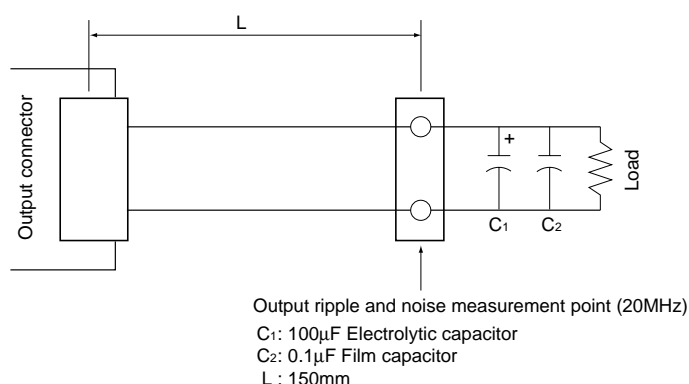
To install the power supply in a device, apply the standard installation direction (A) or (B).

In case of an installation in other directions, please contact TDK.



The shaded portion indicates a side in which an output connector is arranged.

RIPPLE NOISE MEASUREMENT CONDITIONS



SERIES OPERATION (TO INCREASE OUTPUT VOLTAGE OR TO OBTAIN SEPARATE ±OUTPUT)

When the output voltage of a single power supply is insufficient, several power supplies can be connected in series in order to obtain a higher voltage or separate ±outputs.

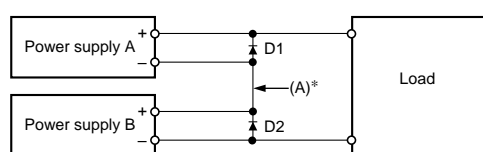
If power supplies A and B in the illustration below are 5V each, a 10V output can be obtained in this connection. It should be noted that, however, the output current is limited to the lower rated current value of the power supplies A and B. There is no problem if the voltages of A and B are different from each other.

D1 and D2 in the illustration designate diodes for preventing reverse voltage application. They are provided for preventing internal components of the power supply having the lower rated voltage from being damaged by an applied reverse voltage caused by a short circuit in the load or the like.

Use diodes which meet the following requirements:

- Reverse withstanding voltage: Over twice that of the combined output voltage
- Forward current: Over twice that of the output current
- Forward voltage drop: As small as possible (e.g. Schottky diode, etc.)

Series connection for increasing output voltage



* For obtaining separate ±outputs, (A) should be zero voltage.

INSULATION AND WITHSTAND VOLTAGE TESTS

The insulation and withstand voltage tests may cause deterioration. Care must be taken for execution of the tests. The potential must be equal among input, output, and FG (frame ground) terminals. It is preferable to use testers that gently start up at the test-ON and automatically discharge charged energy at the test-OFF. Manual discharging after the tests should be through a resistor around 100kΩ to 1MΩ (Do not perform discharging at low impedance. It may cause deterioration.)

In any case, take full countermeasures for electric-shock prevention.

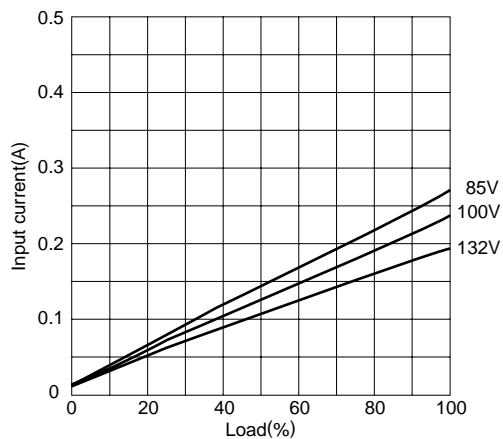
OTHERS

1. Unless conditions are otherwise specified in the specifications or standards, 25°C and rated input-output should be applied.

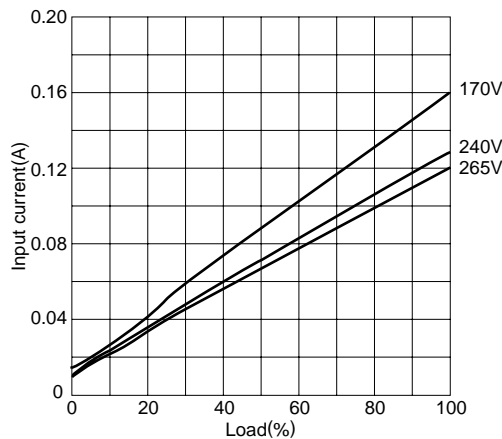
Characteristics, Functions, and Applications

JBW10W Characteristics 1: Typical Characteristics JBW05-2R0

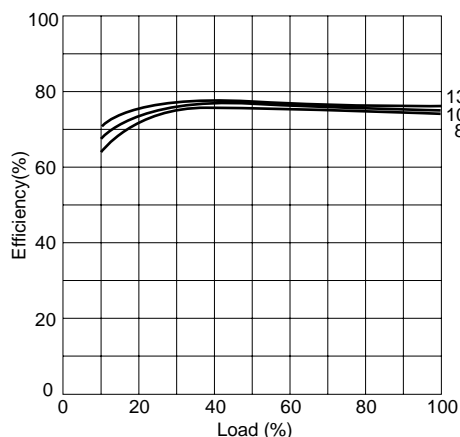
AC.100V TYPE: INPUT CURRENT



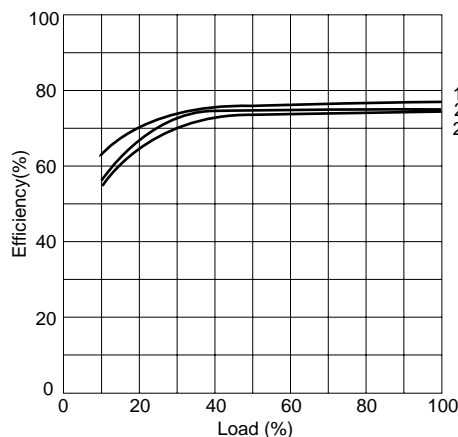
AC.200V TYPE: INPUT CURRENT



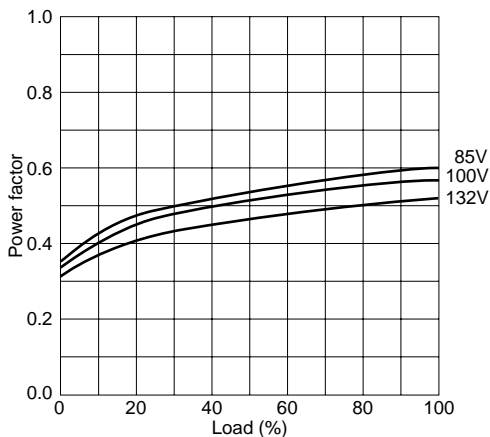
AC.100V TYPE: EFFICIENCY



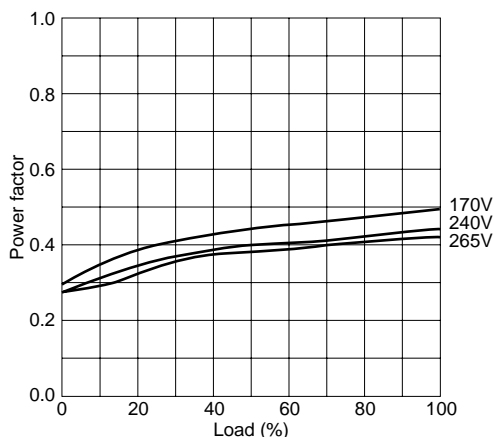
AC.200V TYPE: EFFICIENCY



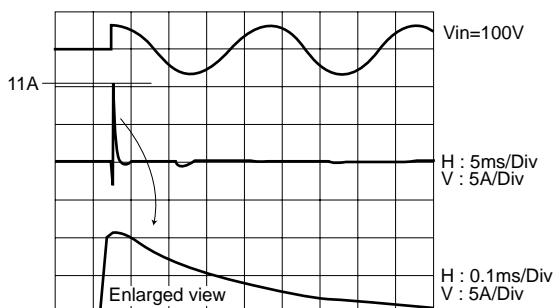
AC.100V TYPE: POWER FACTOR



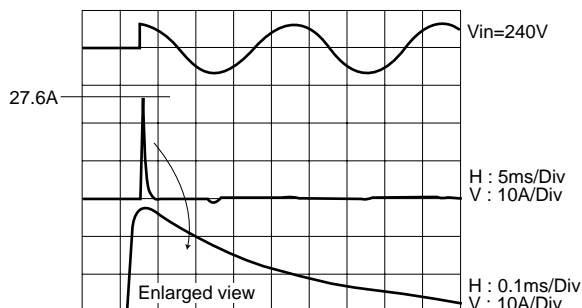
AC.200V TYPE: POWER FACTOR



AC.100V TYPE: SURGE CURRENT



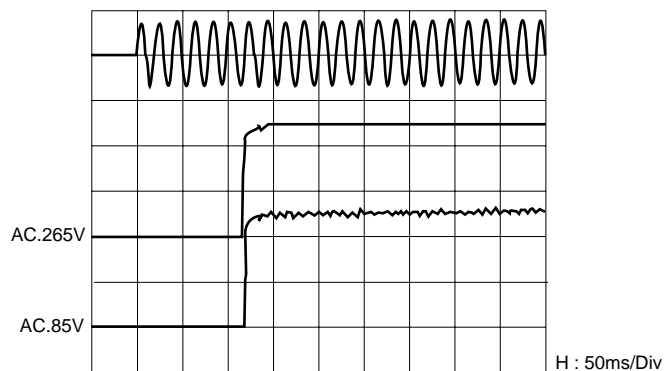
AC.200V TYPE: SURGE CURRENT



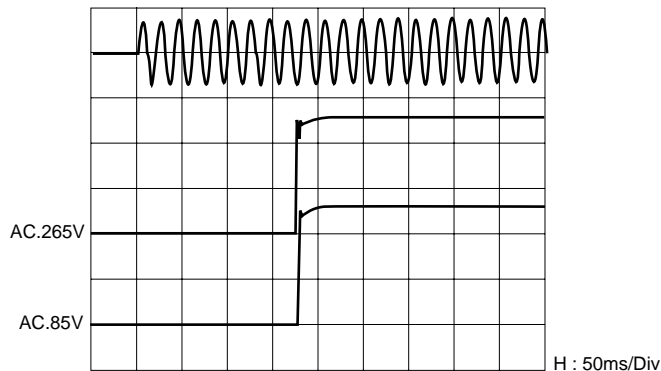
Characteristics, Functions, and Applications

JBW10W Characteristics 2: Typical Characteristics JBW05-2R0

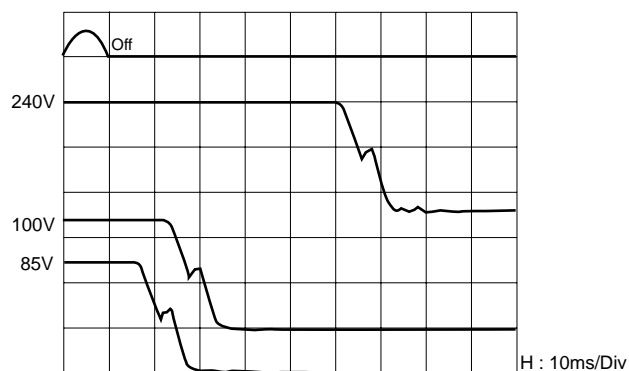
AC.100/200V TYPE: -20°C START UP CHARACTERISTICS



AC.100/200V TYPE: +60°C START UP CHARACTERISTICS



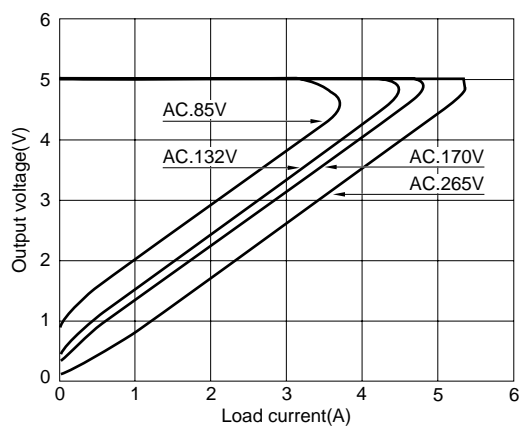
AC.100/200V TYPE: -20°C HOLD UP CHARACTERISTICS



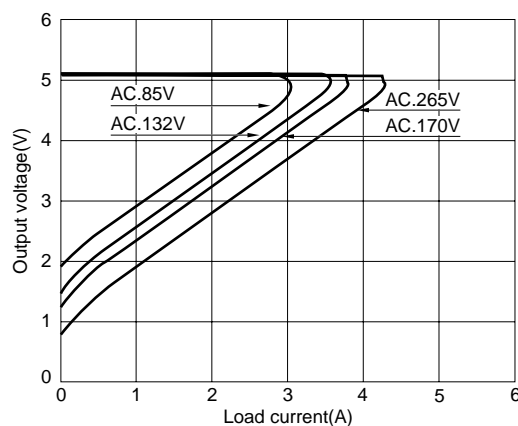
AC.100/200V TYPE: +60°C HOLD UP CHARACTERISTICS



AC.100V/200V TYPE: -20°C OVERCURRENT CURVE



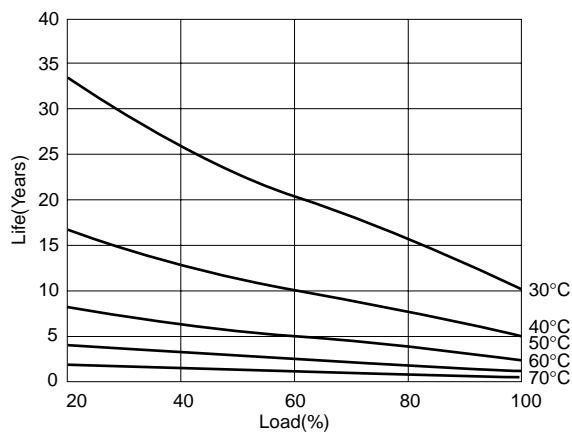
AC.100V/200V TYPE: +60°C OVERCURRENT CURVE



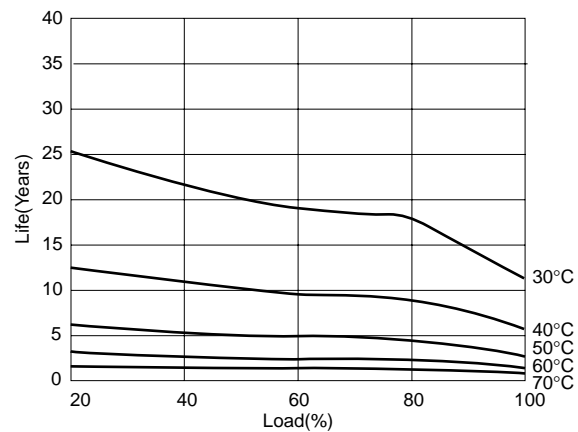
Characteristics, Functions, and Applications

JBW10W Characteristics 3: Typical Characteristics JBW05-2R0

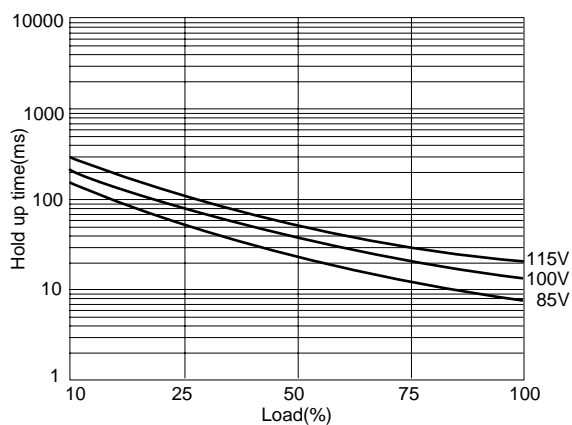
AC.100V TYPE: LIFE OF ELECTROLYTIC CAPACITOR



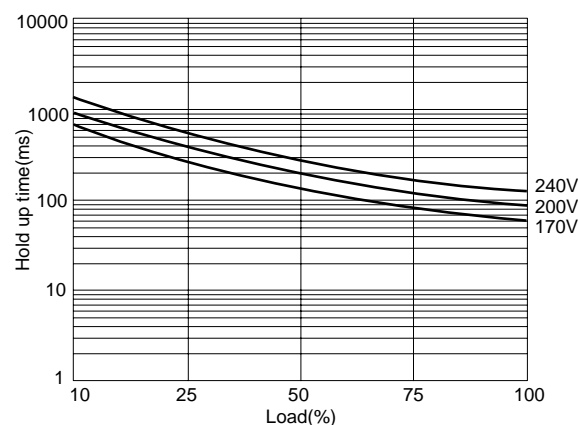
AC.200V TYPE: LIFE OF ELECTROLYTIC CAPACITOR



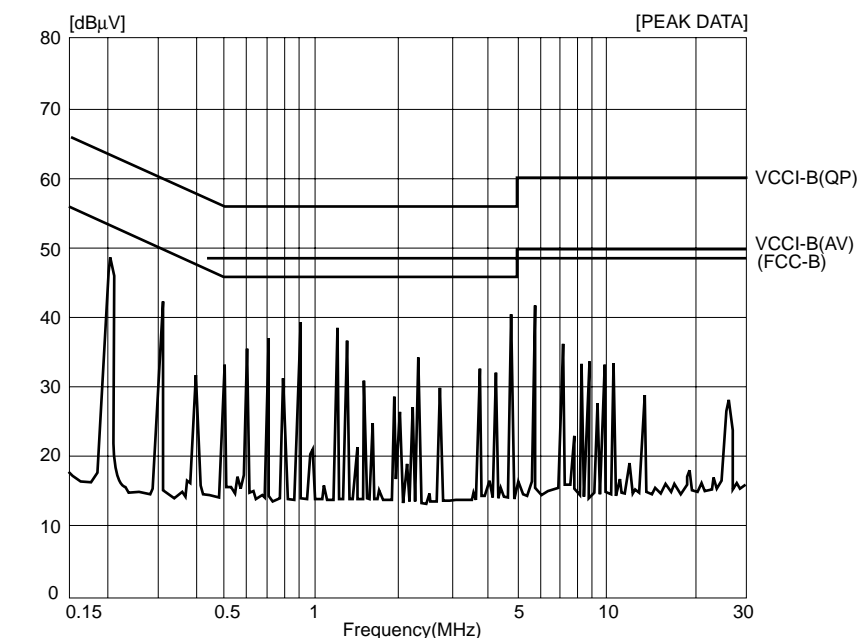
AC.100V TYPE: HOLD UP TIME



AC.200V TYPE: HOLD UP TIME



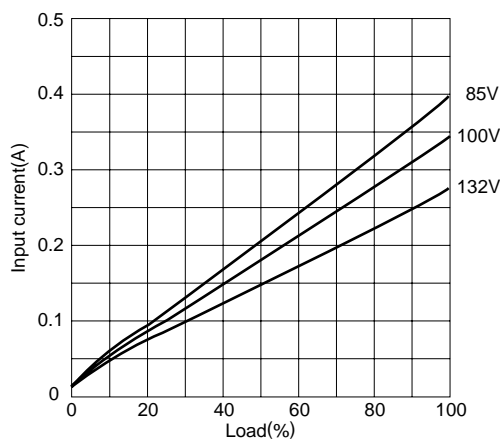
NOISE TERMINAL VOLTAGE



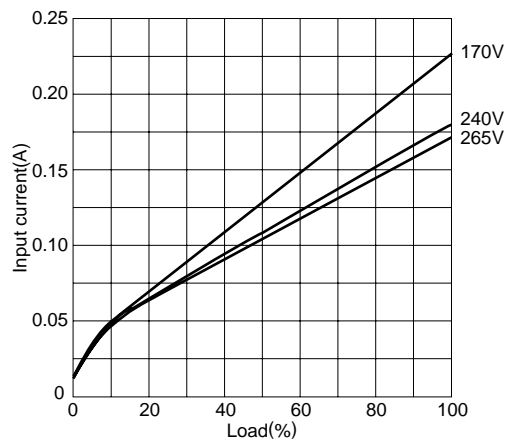
Characteristics, Functions, and Applications

JBW15W Characteristics 1: Typical Characteristics JBW05-3R0

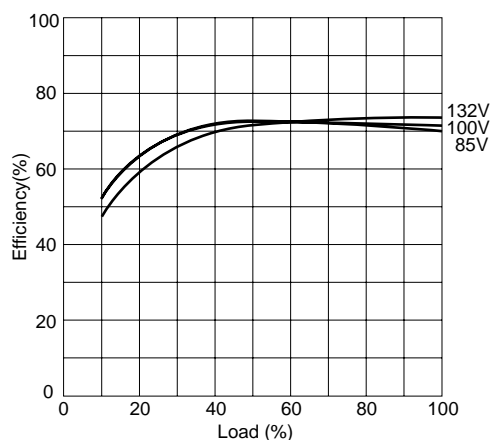
AC.100V TYPE: INPUT CURRENT



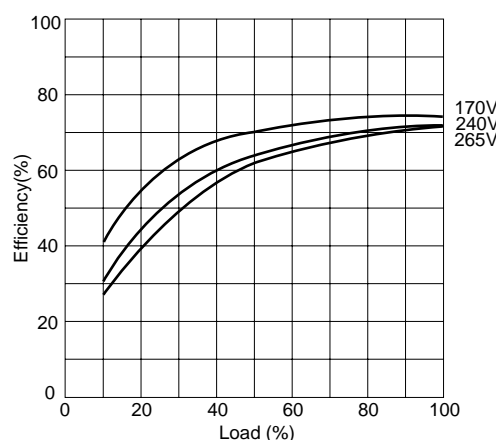
AC.200V TYPE: INPUT CURRENT



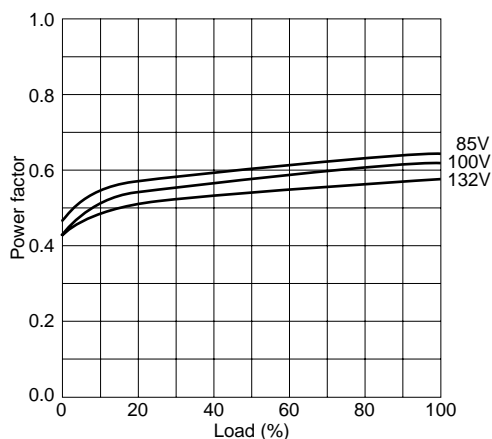
AC.100V TYPE: EFFICIENCY



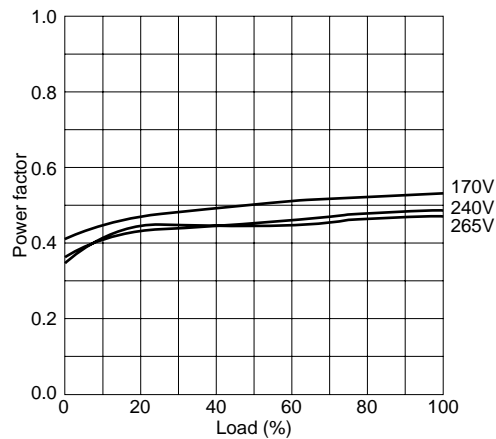
AC.200V TYPE: EFFICIENCY



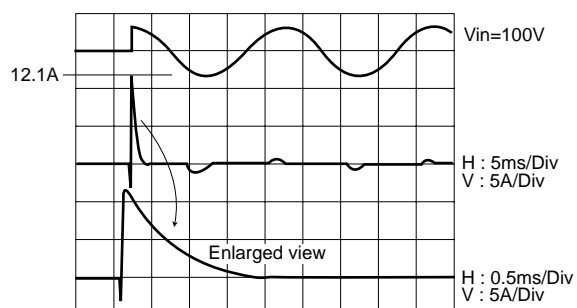
AC.100V TYPE: POWER FACTOR



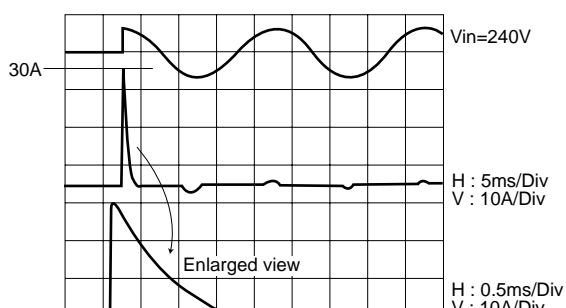
AC.200V TYPE: POWER FACTOR



AC.100V TYPE: SURGE CURRENT



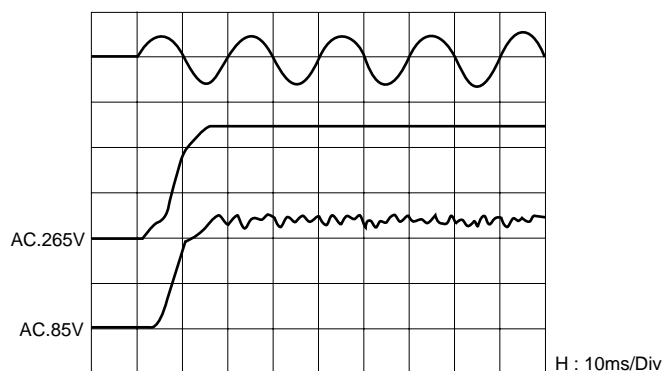
AC.200V TYPE: SURGE CURRENT



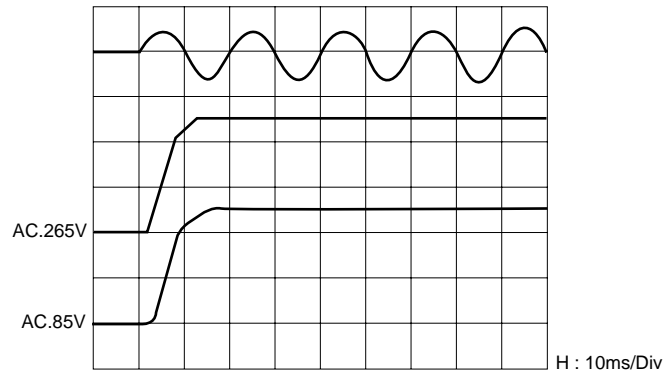
Characteristics, Functions, and Applications

JBW15W Characteristics 2: Typical Characteristics JBW05-3R0

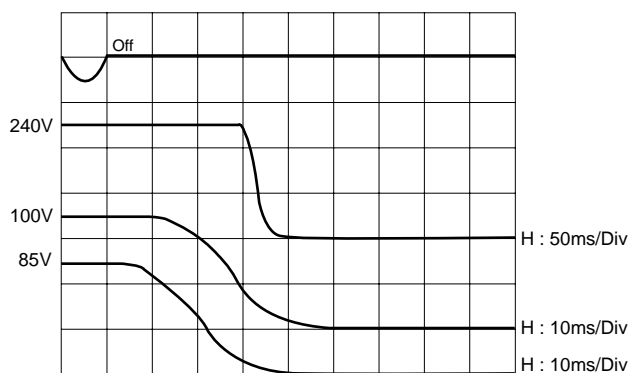
AC.100/200V TYPE: -20°C START UP CHARACTERISTICS



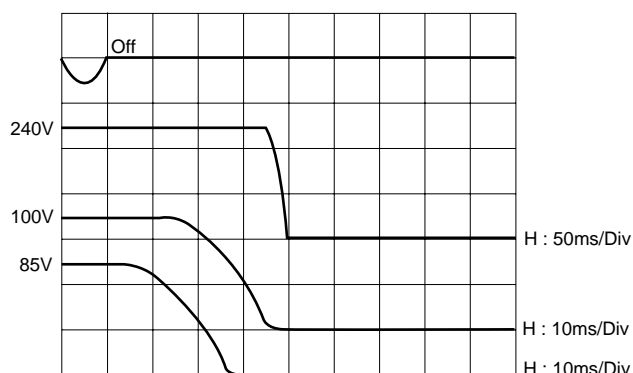
AC.100/200V TYPE: +60°C START UP CHARACTERISTICS



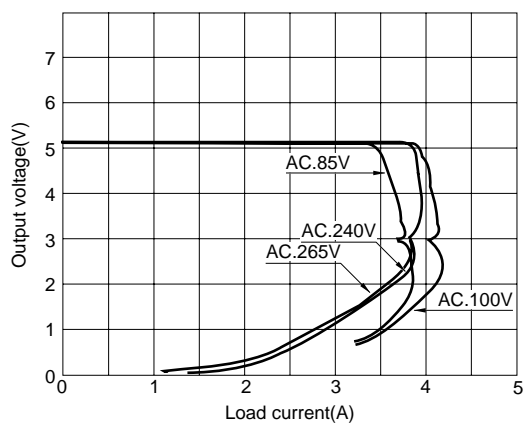
AC.100/200V TYPE: -20°C HOLD UP CHARACTERISTICS



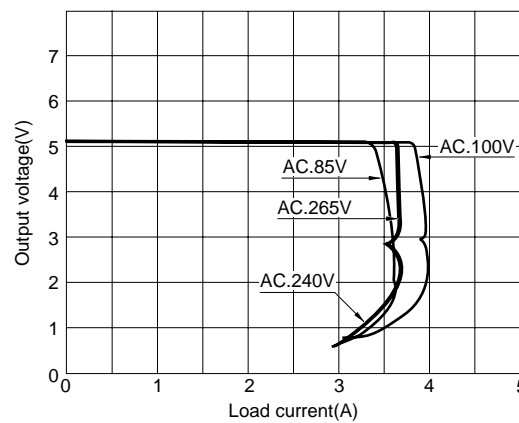
AC.100/200V TYPE: +60°C HOLD UP CHARACTERISTICS



AC.100V/200V TYPE: -20°C OVERCURRENT CURVE



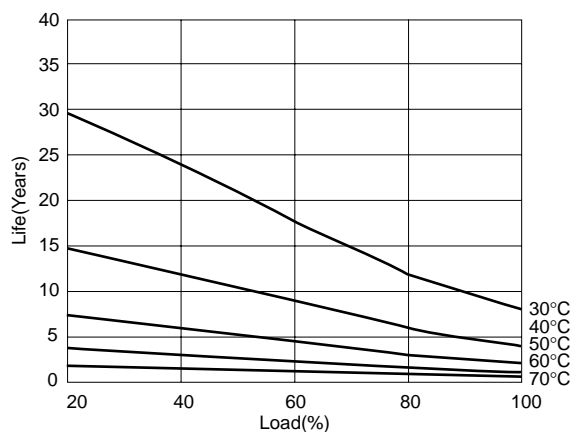
AC.100V/200V TYPE: +60°C OVERCURRENT CURVE



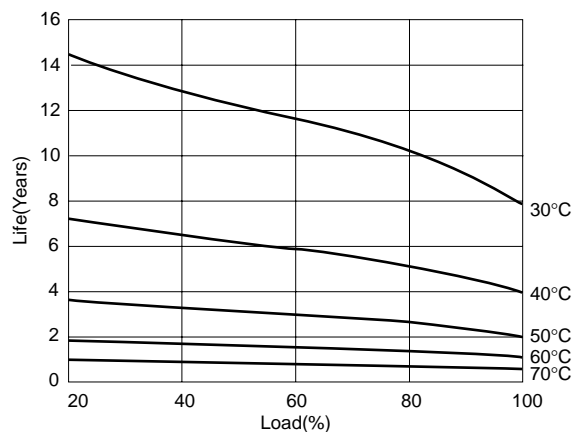
Characteristics, Functions, and Applications

JBW15W Characteristics 3: Typical Characteristics JBW05-3R0

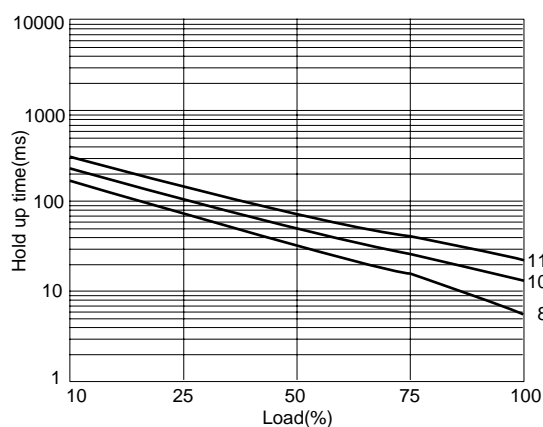
AC.100V TYPE: LIFE OF ELECTROLYTIC CAPACITOR



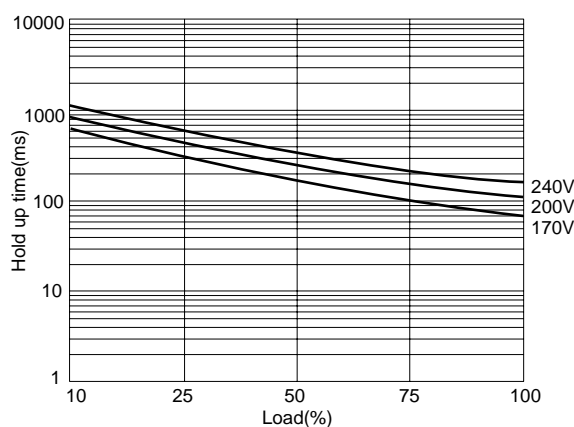
AC.200V TYPE: LIFE OF ELECTROLYTIC CAPACITOR



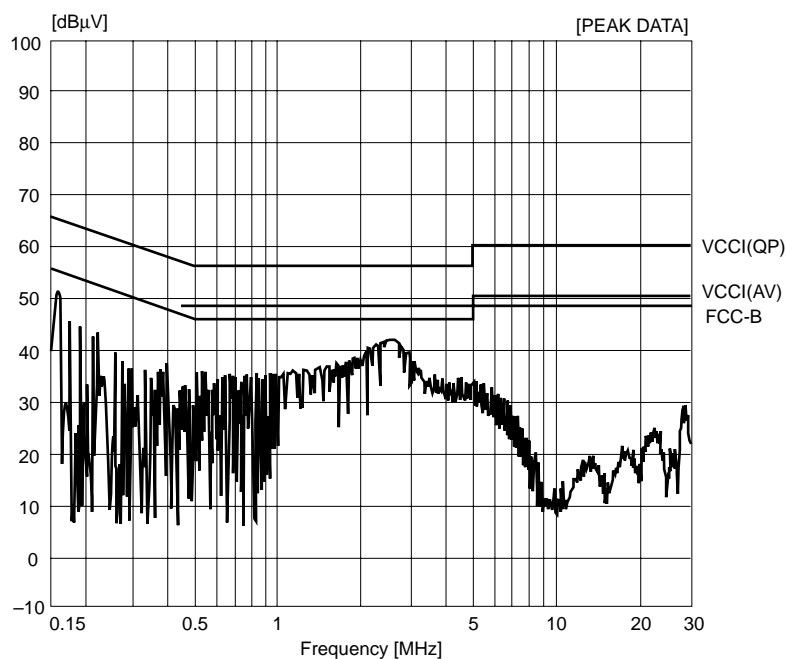
AC.100V TYPE: HOLD UP TIME



AC.200V TYPE: HOLD UP TIME



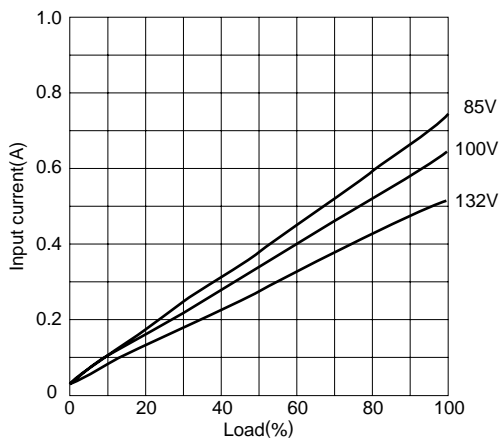
NOISE TERMINAL VOLTAGE



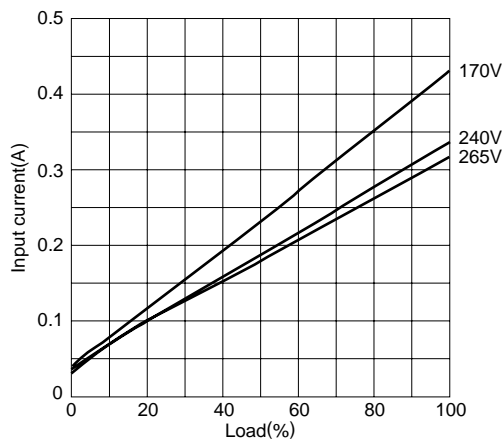
Characteristics, Functions, and Applications

JBW30W Characteristics 1: Typical Characteristics JBW05-6R0

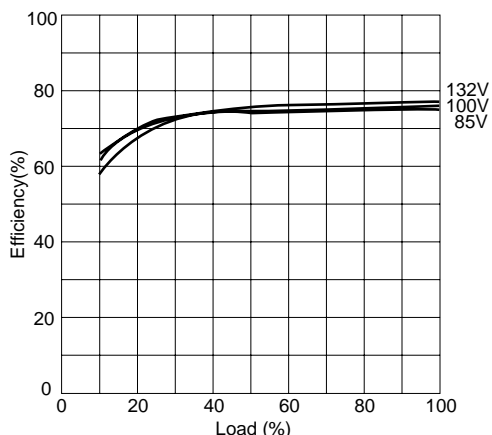
AC.100V TYPE: INPUT CURRENT



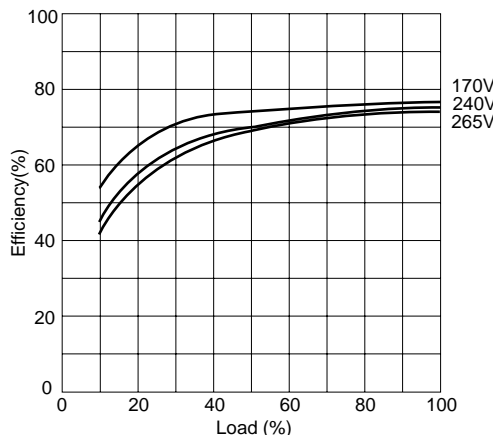
AC.200V TYPE: INPUT CURRENT



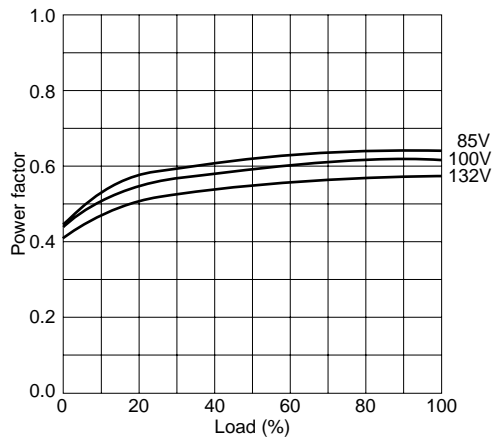
AC.100V TYPE: EFFICIENCY



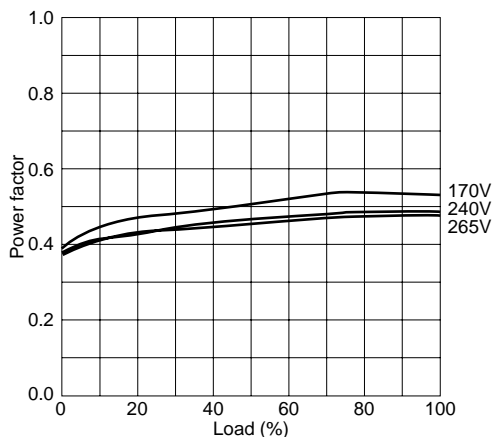
AC.200V TYPE: EFFICIENCY



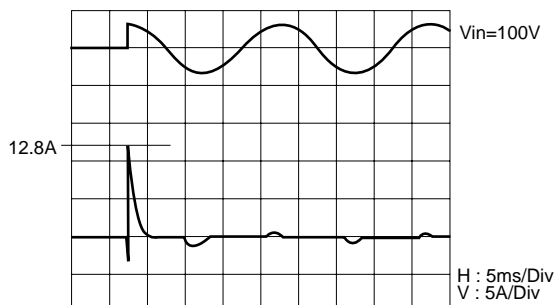
AC.100V TYPE: POWER FACTOR



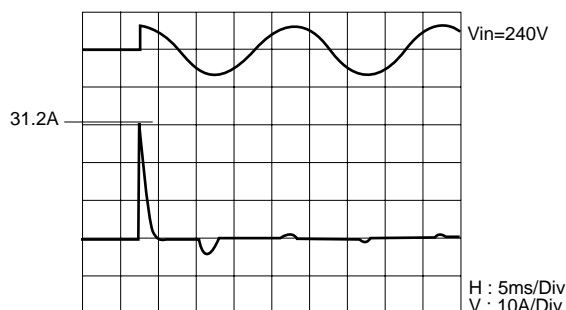
AC.200V TYPE: POWER FACTOR



AC.100V TYPE: SURGE CURRENT



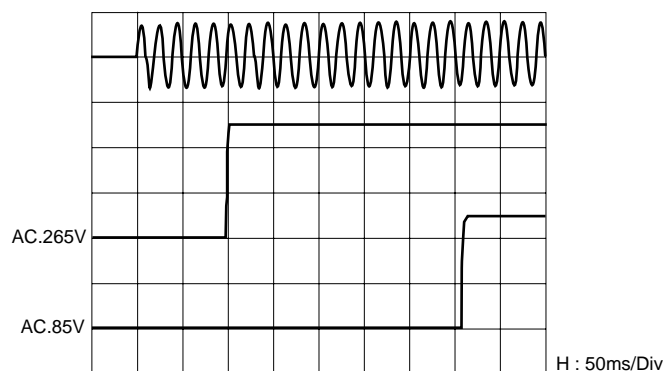
AC.200V TYPE: SURGE CURRENT



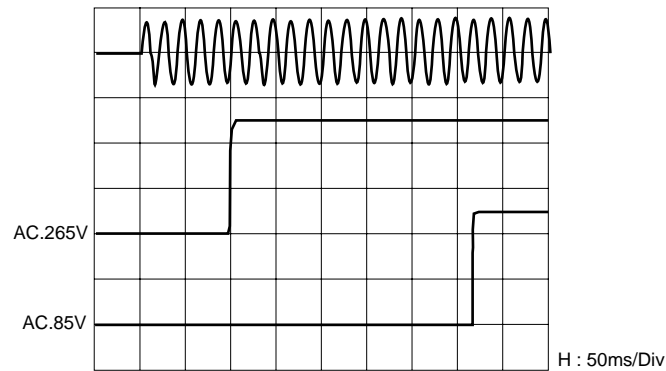
Characteristics, Functions, and Applications

JBW30W Characteristics 2: Typical Characteristics JBW05-6R0

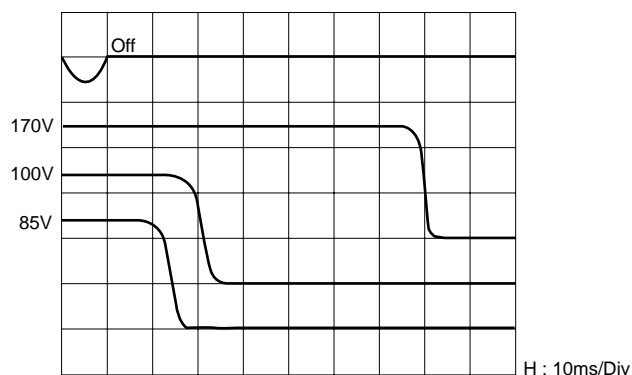
AC.100/200V TYPE: -20°C START UP CHARACTERISTICS



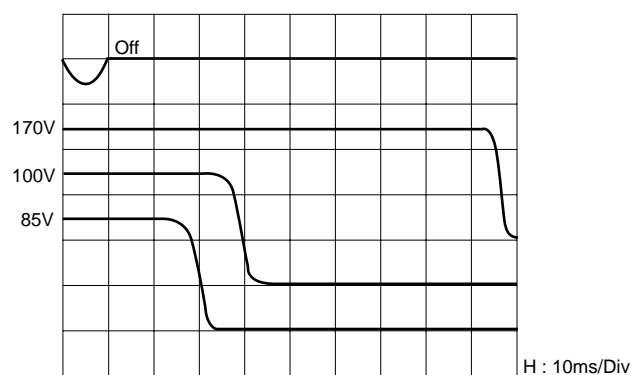
AC.100/200V TYPE: +60°C START UP CHARACTERISTICS



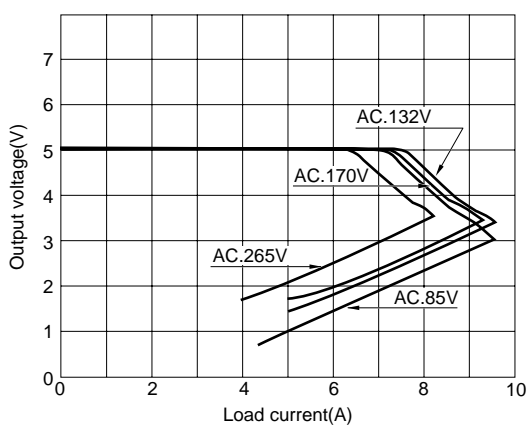
AC.100/200V TYPE: -20°C HOLD UP CHARACTERISTICS



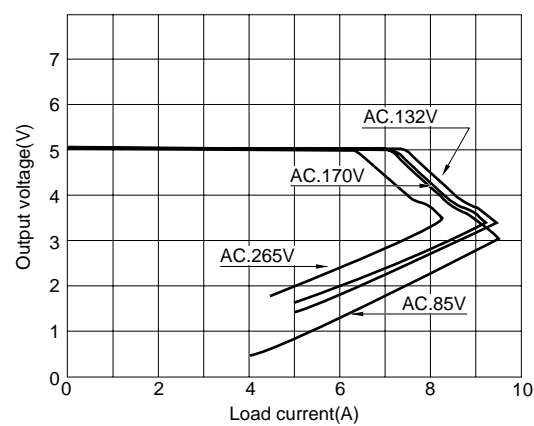
AC.100/200V TYPE: +60°C HOLD UP CHARACTERISTICS



AC.100V/200V TYPE: -20°C OVERCURRENT CURVE



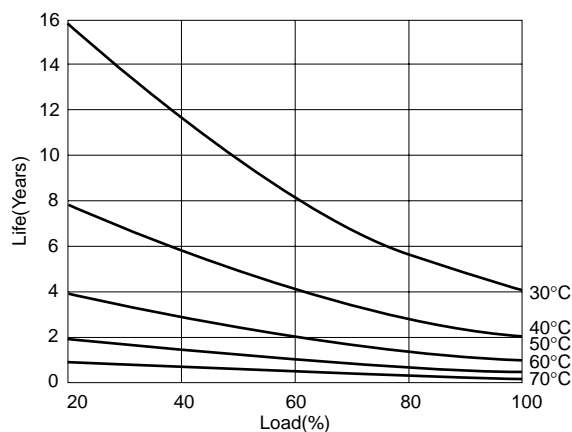
AC.100V/200V TYPE: +60°C OVERCURRENT CURVE



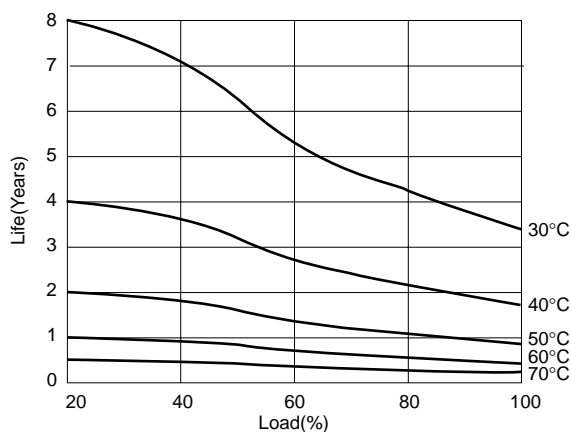
Characteristics, Functions, and Applications

JBW30W Characteristics 3: Typical Characteristics JBW05-6R0

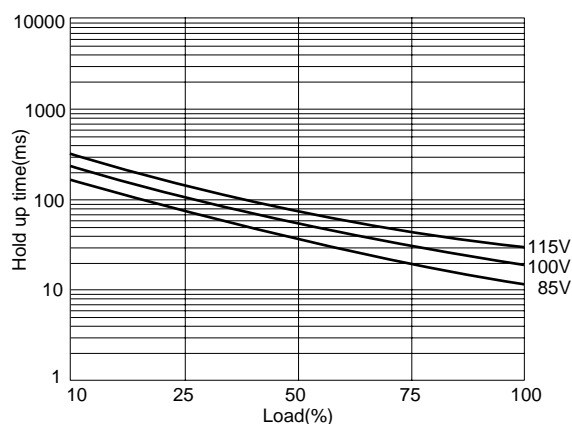
AC.100V TYPE: LIFE OF ELECTROLYTIC CAPACITOR



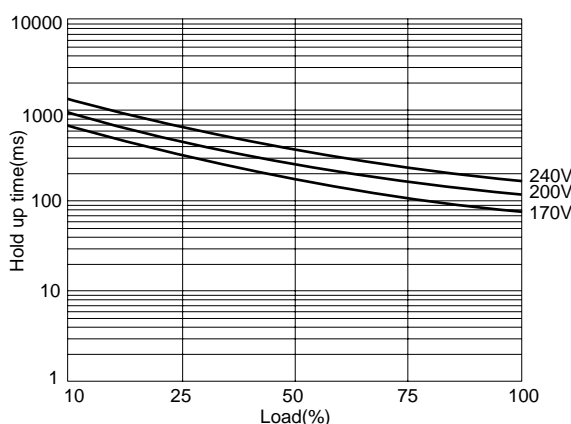
AC.200V TYPE: LIFE OF ELECTROLYTIC CAPACITOR



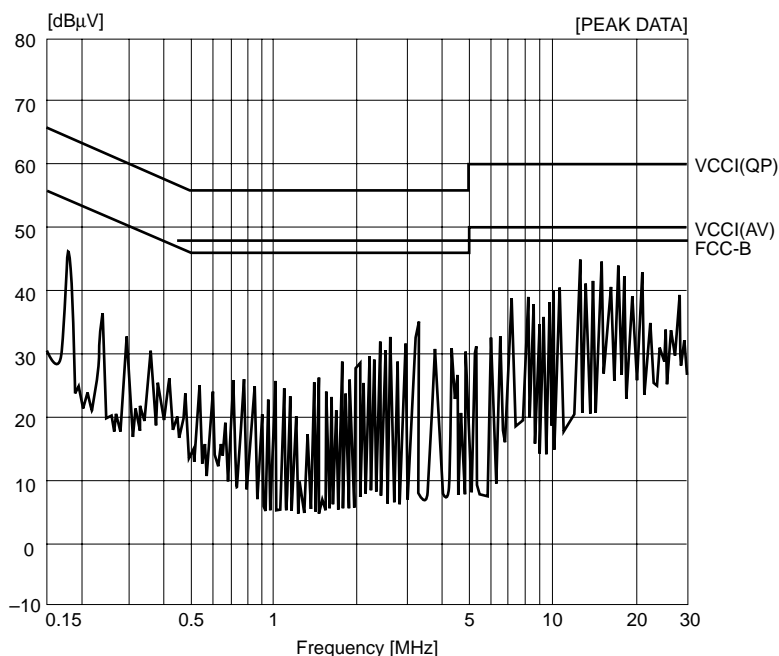
AC.100V TYPE: HOLD UP TIME



AC.200V TYPE: HOLD UP TIME



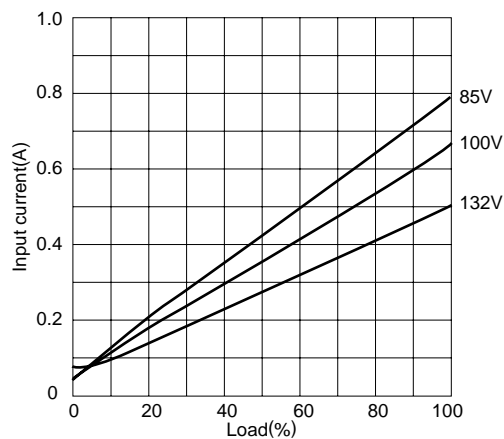
NOISE TERMINAL VOLTAGE



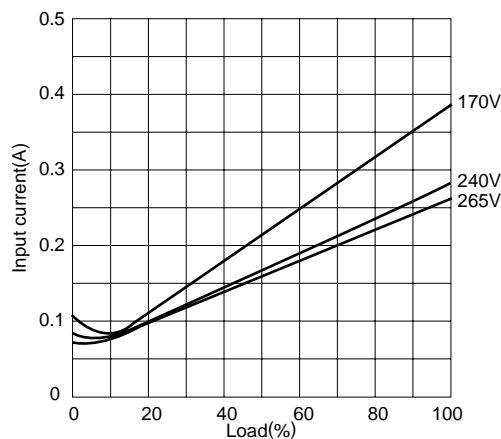
Characteristics, Functions, and Applications

JBW50W Characteristics 1: Typical Characteristics JBW05-10R

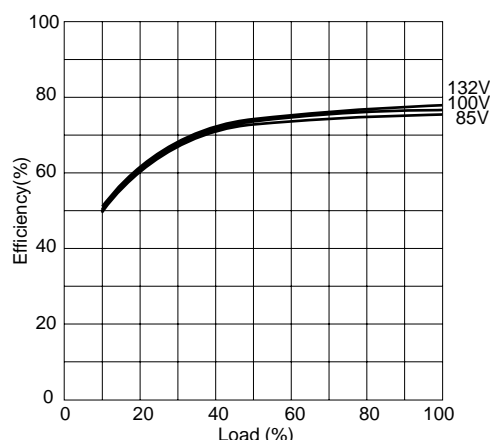
AC.100V TYPE: INPUT CURRENT



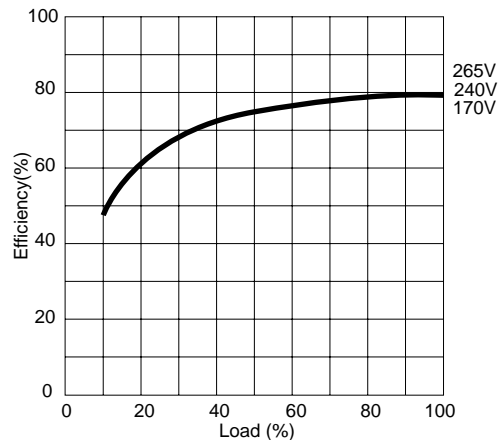
AC.200V TYPE: INPUT CURRENT



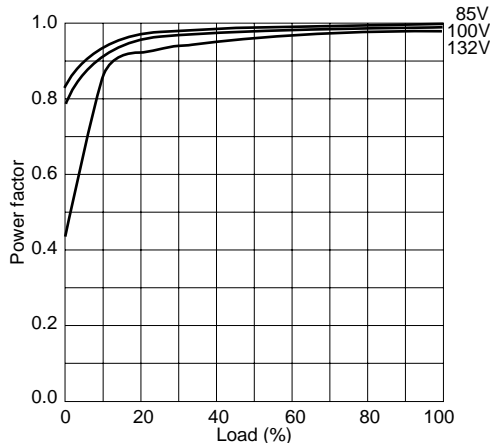
AC.100V TYPE: EFFICIENCY



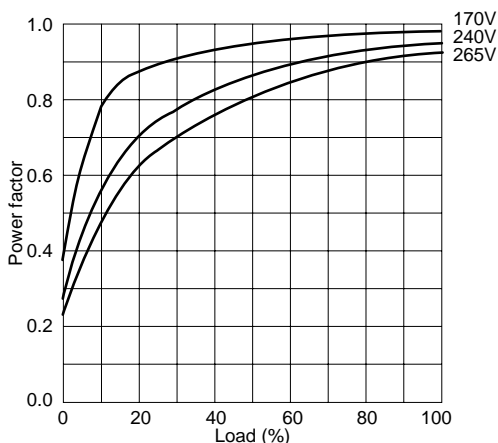
AC.200V TYPE: EFFICIENCY



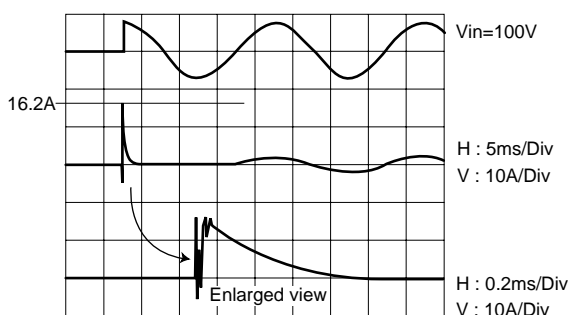
AC.100V TYPE: POWER FACTOR



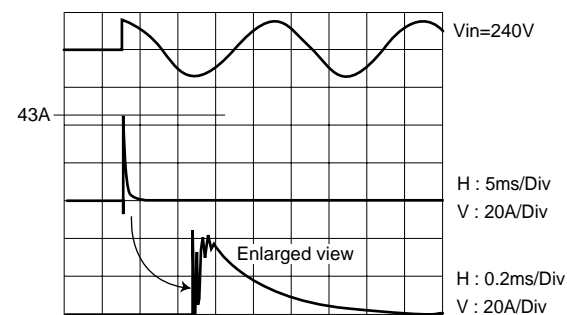
AC.200V TYPE: POWER FACTOR



AC.100V TYPE: SURGE CURRENT



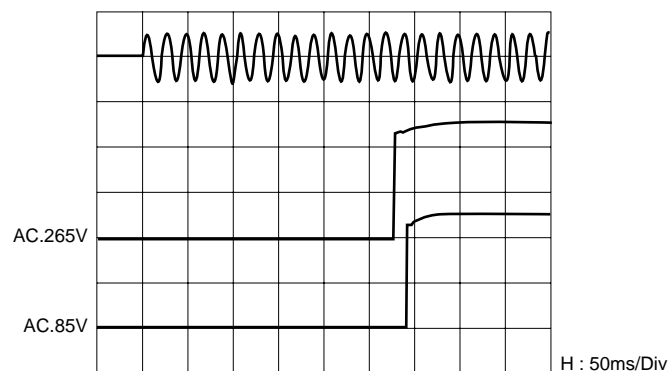
AC.200V TYPE: SURGE CURRENT



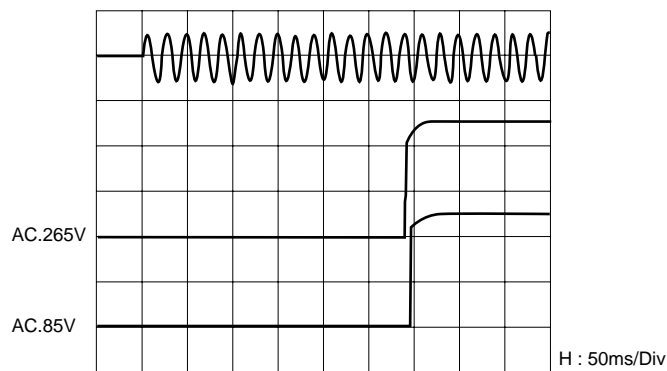
Characteristics, Functions, and Applications

JBW50W Characteristics 2: Typical Characteristics JBW05-10R

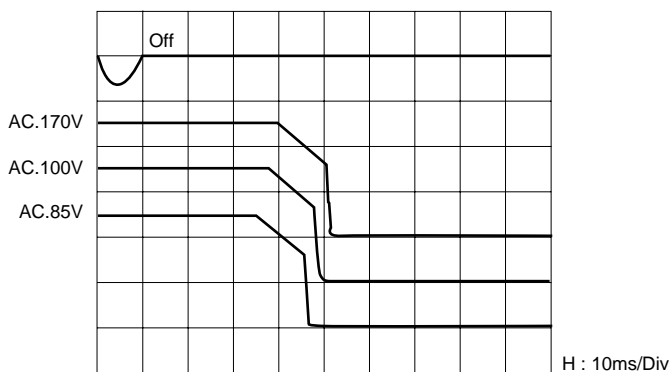
AC.100/200V TYPE: -20°C START UP CHARACTERISTICS



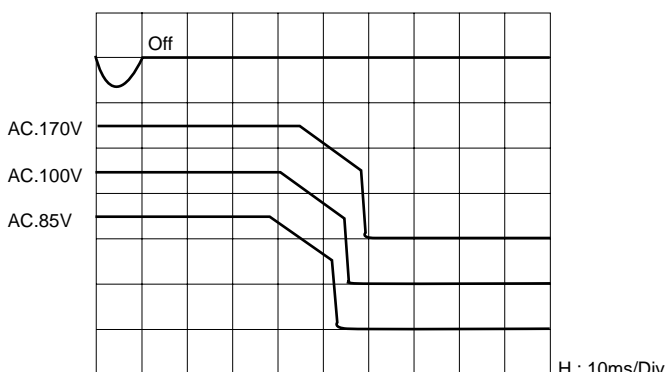
AC.100/200V TYPE: +60°C START UP CHARACTERISTICS



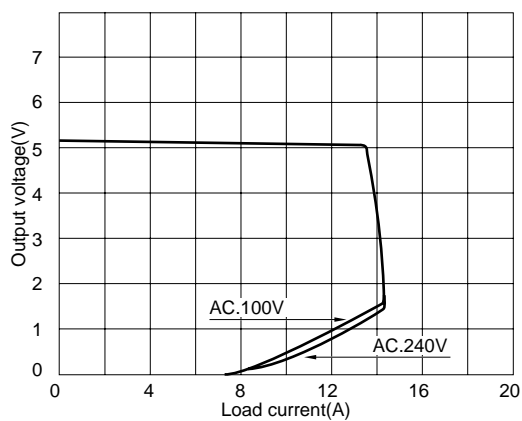
AC.100/200V TYPE: -20°C HOLD UP CHARACTERISTICS



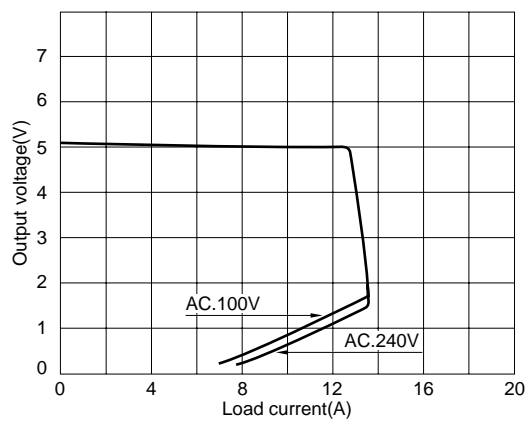
AC.100/200V TYPE: +60°C HOLD UP CHARACTERISTICS



AC.100V/200V TYPE: -20°C OVERCURRENT CURVE



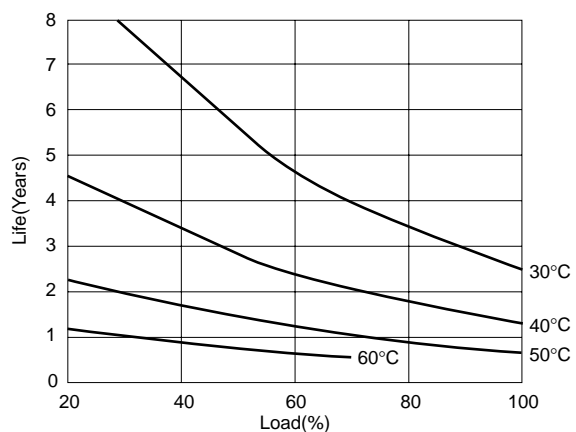
AC.100V/200V TYPE: +60°C OVERCURRENT CURVE



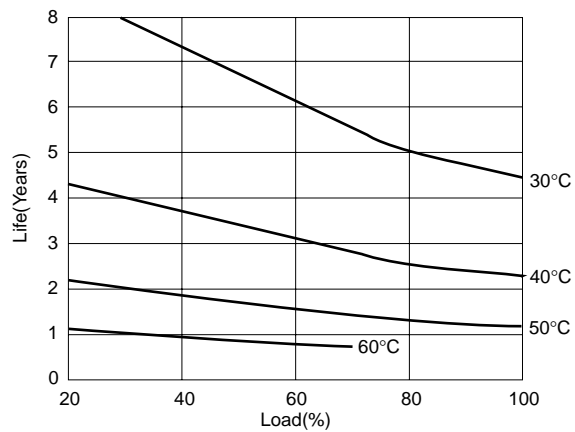
Characteristics, Functions, and Applications

JBW50W Characteristics 3: Typical Characteristics JBW05-10R

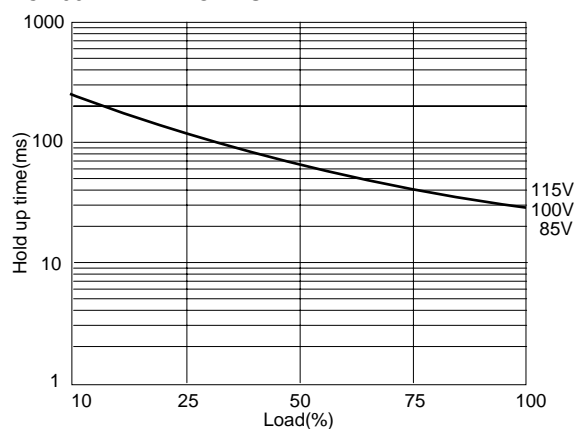
AC.100V TYPE: LIFE OF ELECTROLYTIC CAPACITOR



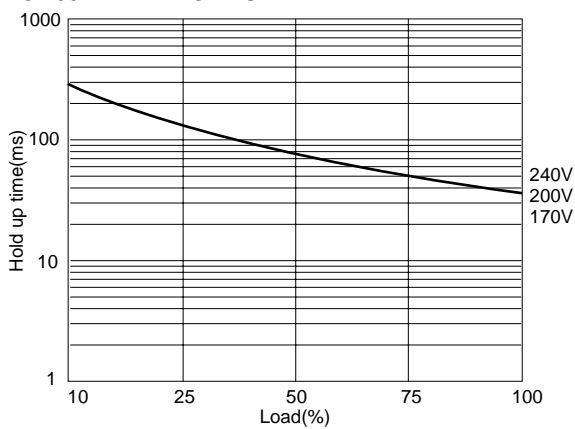
AC.200V TYPE: LIFE OF ELECTROLYTIC CAPACITOR



AC.100V TYPE: HOLD UP TIME



AC.200V TYPE: HOLD UP TIME



NOISE TERMINAL VOLTAGE

