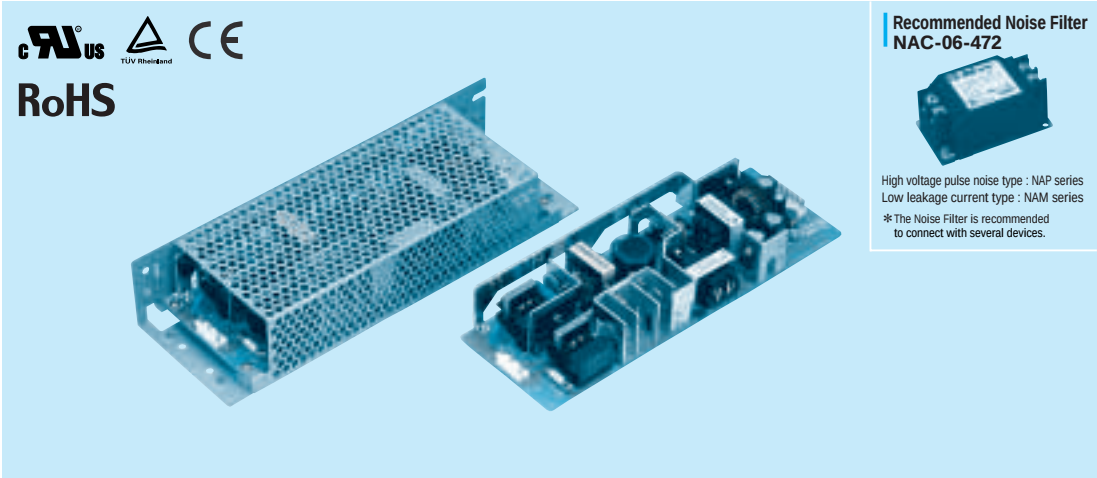
COSEL **Rugged PCB type**

LEB100F

Ordering information

LEB	100	F	-05	24	-□
①	②	③	④	⑤	⑥



Recommended Noise Filter
NAC-06-472

High voltage pulse noise type : NAP series
Low leakage current type : NAM series

*The Noise Filter is recommended to connect with several devices.

①Series name
②Output wattage
③Universal input
④V1 Output voltage
⑤V2 Output voltage
⑥Optional *1
G :Low leakage current
R :with Remote ON/OFF
S :with Chassis
SN :with Chassis & cover
T :Vertical terminal block
Y :with Potentiometer
Z :with ZT

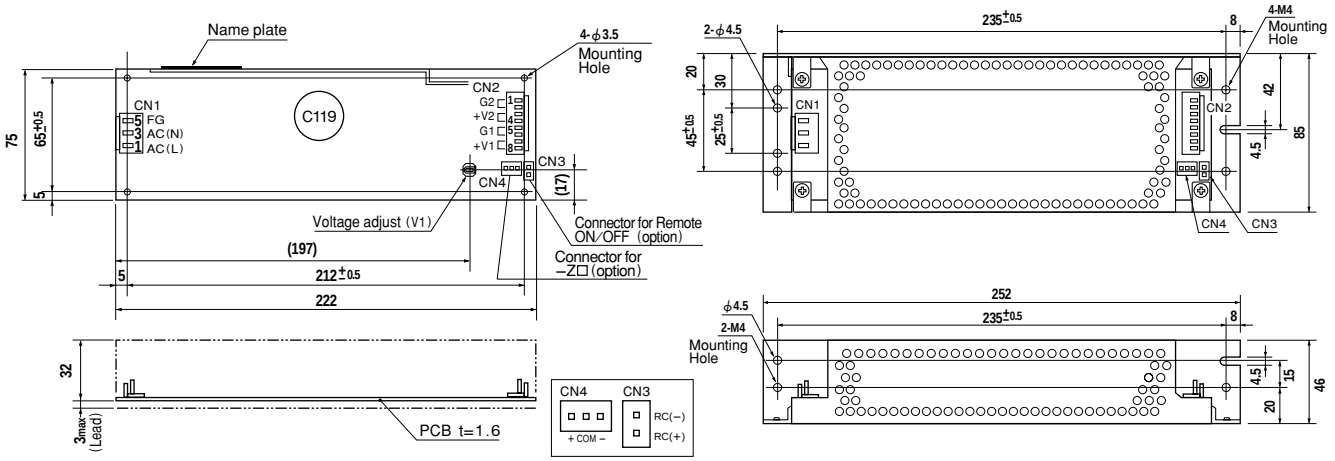
MODEL		LEB100F-0512	LEB100F-0324	LEB100F-0524	LEB100F-0530	LEB100F-0536
DC OUTPUT	V1	+5V 5A	+3.3V 5A	+5V 5A	+5V 5A	+5V 5A
	V2	+12V 5(Peak 10)A	+24V 4(Peak 7)A	+24V 4(Peak 7)A	+30V 3.2(Peak 5.6)A	+36V 2.7(Peak 4.7)A

SPECIFICATIONS

	MODEL		LEB100F-0512		LEB100F-0324		LEB100F-0524		LEB100F-0530		LEB100F-0536	
INPUT	VOLTAGE[V]		AC85 - 264 1φ or DC 120 - 370									
	CURRENT[A]	ACIN 100V	1.2typ (Io=100%)		1.4typ (Io=100%)							
		ACIN 200V	0.6typ (Io=100%)		0.7typ (Io=100%)							
	FREQUENCY[Hz]		50/60 (47 - 63) or DC									
	EFFICIENCY[%]	ACIN 100V	74typ (Io=100%)		78typ (Io=100%)		78typ (Io=100%)		78typ (Io=100%)		78typ (Io=100%)	
		ACIN 200V	76typ (Io=100%)		80typ (Io=100%)		80typ (Io=100%)		80typ (Io=100%)		80typ (Io=100%)	
	POWER FACTOR	ACIN 100V	0.98typ		0.99typ							
		ACIN 200V	0.93typ									
	INRUSH CURRENT[A]	ACIN 100V	15typ (Io=100%) (At cold start) (Ta=25℃)									
		ACIN 200V	30typ (Io=100%) (At cold start) (Ta=25℃)									
	LEAKAGE CURRENT[mA]		0.75max (60Hz, According to IEC60950 and DEN-AN)									
OUTPUT	VOLTAGE[V]		+5	+12	+3.3	+24	+5	+24	+5	+30	+5	+36
	CURRENT[A]	*2	0 - 5	0 - 5 (Peak 10)	0 - 5	0 - 4 (Peak 7)	0 - 5	0 - 4 (Peak 7)	0 - 5	0 - 3.2 (Peak 5.6)	0 - 5	0 - 2.7 (Peak 4.7)
	TOTAL OUTPUT WATTAGE[W]	*3	85 (Peak 145)		100 (Peak 172)		100 (Peak 172)		100 (Peak 172)		100 (Peak 172)	
	LINE REGULATION[mV]		20max	48max	20max	96max	20max	96max	20max	120max	20max	144max
	LOAD REGULATION[mV]		40max	100max	40max	150max	40max	150max	40max	180max	40max	180max
	RIPPLE[mVp-p]	0 to +50℃ *4	80max	120max	80max	120max	80max	120max	80max	200max	80max	200max
		-10 - 0℃ *4	140max	160max	140max	160max	140max	160max	140max	240max	140max	240max
	RIPPLE NOISE[mVp-p]	0 to +50℃ *4	120max	150max	120max	150max	120max	150max	120max	300max	120max	300max
		-10 - 0℃ *4	160max	180max	160max	180max	160max	180max	160max	360max	160max	360max
	TEMPERATURE REGULATION[mV]	0 to +50℃	50max	120max	50max	240max	50max	240max	50max	300max	50max	300max
		-10 to +50℃	60max	150max	60max	290max	60max	290max	60max	350max	60max	350max
	DRIFT[mV]	*5	20max	48max	20max	96max	20max	96max	20max	120max	20max	144max
	START-UP TIME[ms]	*6	250max	500max	250max	500max	250max	500max	250max	500max	250max	500max
	HOLD-UP TIME[ms]	*6	40typ	20typ	40typ	20typ	40typ	20typ	40typ	20typ	40typ	20typ
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		4.5 - 5.5	Fixed	2.85 - 3.60	Fixed	4.5 - 5.5	Fixed	4.5 - 5.5	Fixed	4.5 - 5.5	Fixed
	OUTPUT VOLTAGE SETTING[V]		——	11.5 - 12.5	——	23.0 - 25.0	——	23.0 - 25.0	——	28.7 - 31.5	——	34.5 - 37.5
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	V1	Works over 105% of rating current and recovers automatically									
		V2	Works over 101% of peak current and recovers automatically									
	OVERVOLTAGE PROTECTION	V1	Works over 115% of rating, by zener diode clamping									
		V2	Works at 115 - 140% of rating									
	REMOTE ON/OFF		Option (Refer to Instruction Manual)									
ISOLATION	INPUT-OUTPUT · RC	*7	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 · RC-FG	*7	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)									
	OUTPUT-OUTPUT(V1 · RC-V2)	*7	AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ min (At Room Temperature)									
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +70℃, 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, EN60950-1, EN50178 Complies with DEN-AN and IEC60950-1 (At only AC input)									
	CONDUCTED NOISE		Complies with FCC-B, CISPR22-B, EN55022-B, VCCI-B									
	HARMONIC ATTENUATOR		Complies with IEC61000-3-2									
OTHERS	CASE SIZE/WEIGHT		75×35×222mm (W×H×D) /420g max (without chassis and cover)									
	COOLING METHOD		Convection									

*1 Specification is changed at option, refer to Instruction Manual 5.
*2 Peak loading for 10sec. And Duty 35% max, refer to Instruction Manual 4. In detail.
*3 Refer to Instruction Manual 2.2 in detail.
*4 This is the value that measured on measuring board with capacitor of 22μF within 150mm from output terminal.Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN: RM101).
*5 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃, with the input voltage held constant at the rated input/output.
*6 ACIN 100V,Io=100%
*7 Applicable when remote control (optional) is added.
* Series/Parallel operation is not possible.
* Derating is required when operated with chassis and cover.
* A sound may occur from power supply at peak loading.

External view



〈PIN CONNECTION〉

I / O Connector		Mating Connector	Terminal
CN1	B3P5-VH	VHR-5N	Chain: SVH-21T-P1.1
			Loose: BVH-21T-P1.1
CN2	B8P-VH	VHR-8N	Chain: SVH-21T-P1.1
			Loose: BVH-21T-P1.1
CN3 (Option)	B2B-XH-A	XHP-2	Chain: SXH-001T-P0.6
			Loose: BXH-001T-P0.6
CN4 (Option)	B3B-XH-A	XHP-3	Chain: SXH-001T-P0.6
			Loose: BXH-001T-P0.6

(Mfr: J.S.T.)

CN1

Pin No.	Input
1	AC(L)
2	
3	AC(N)
4	
5	FG

CN2

Pin No.	Output
1, 2	G 2
3, 4	V 2
5, 6	G 1
7, 8	V 1

CN3 (Option)

Pin No.	Remote ON/OFF
1	RC(+)
2	RC(−)

CN4 (Option)

Pin No.	−Z□
1	+
2	COM
3	−

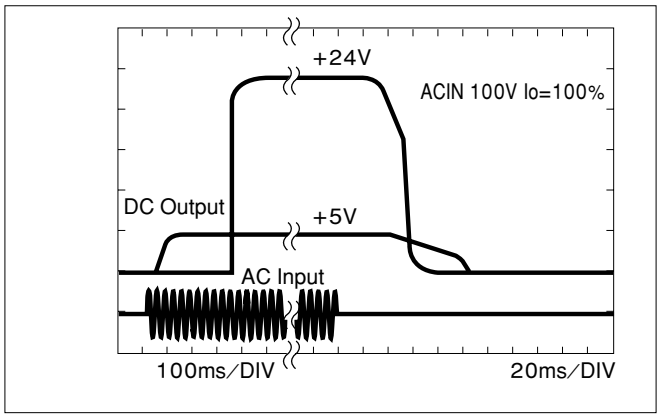
※Weight: 420g or less
(Without chassis and cover)
※Tolerance: ±1
※Dimensions in mm.
※PCB Material : CEM3
※Chassis and cover is optional.
※Mounting torque: 1.5N·m(16kgf·cm)max

※Keep drawing current per pin below 5A for CN2

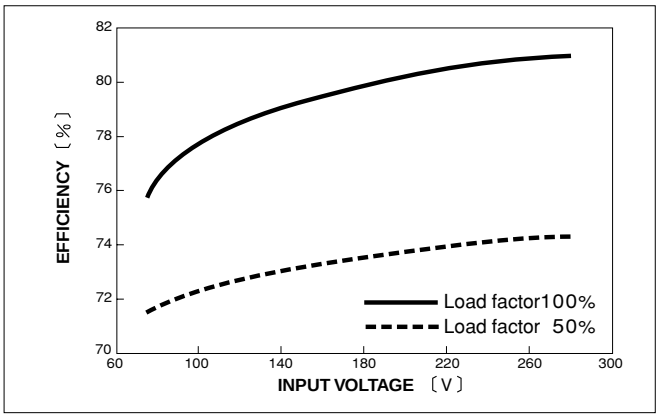
Performance data

LEB

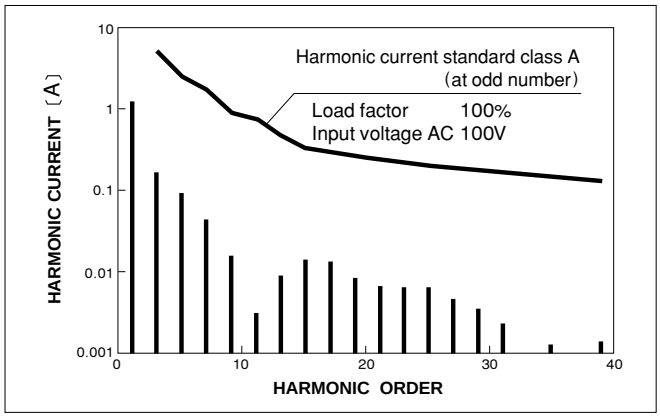
■RISE TIME & FALL TIME (LEB100F-0524)



■EFFICIENCY (LEB100F-0524)



■INPUT HARMONIC CURRENT (LEB100F-0524)



■INPUT HARMONIC CURRENT (LEB100F-0524)