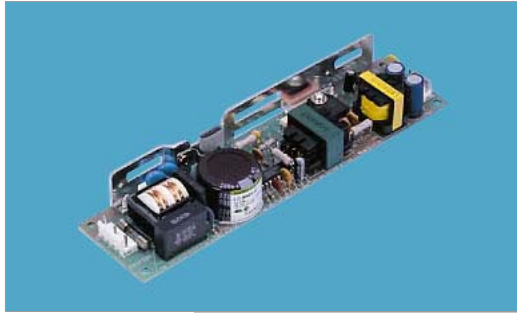


LCA50S



Features

- Small and compact PCB construction
- UL recognized, CSA certified
- Built-in Inrush Current Protection
- RoHS Compliant

Safety Agency Approvals

- Complies with DEN-AN
- UL1950, CSA C22.2 No.234

EMI Compliance

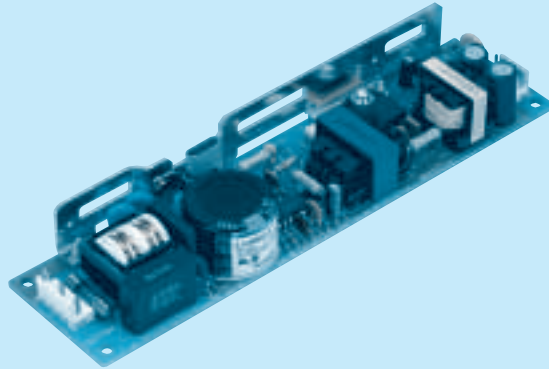
- FCC-B
- VCCI-B

2 year warranty(refer to Instruction Manual)

Model	Input Voltage [V]	Output Wattage [W]	DC Output [V/A]
LCA50S-3	DC 110 - 170 AC 85 - 132	30	3V 10A
LCA50S-5	DC 110 - 170 AC 85 - 132	50	5V 10A
LCA50S-12	DC 110 - 170 AC 85 - 132	51.6	12V 4.3A
LCA50S-15	DC 110 - 170 AC 85 - 132	52.5	15V 3.5A
LCA50S-24	DC 110 - 170 AC 85 - 132	60	24V 2.5A
LCA50S-24-H	DC 110 - 170 AC 85 - 132	60 (peak 72)	24V 2.5A (peak 3A)
LCA50S-36	DC 110 - 170 AC 85 - 132	61.2	36V 1.7A
LCA50S-48	DC 110 - 170 AC 85 - 132	62.4	48V 1.3A

LC A 50 S -5 -□

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.

- ① Series name
- ② 100/120V input
- ③ Output wattage
- ④ Single output
- ⑤ Output voltage
- ⑥ Optional
- C :with Coating
- G :Low leakage current
- Y :with Potentiometer

MODEL	LCA50S-3	LCA50S-5	LCA50S-12	LCA50S-15	LCA50S-24	LCA50S-24-H	LCA50S-36	LCA50S-48
MAX OUTPUT WATTAGE[W]	30	50	51.6	52.5	60	60	61.2	62.4
DC OUTPUT	3V 10A	5V 10A	12V 4.3A	15V 3.5A	24V 2.5A	24V 2.5A	36V 1.7A	48V 1.3A

SPECIFICATIONS

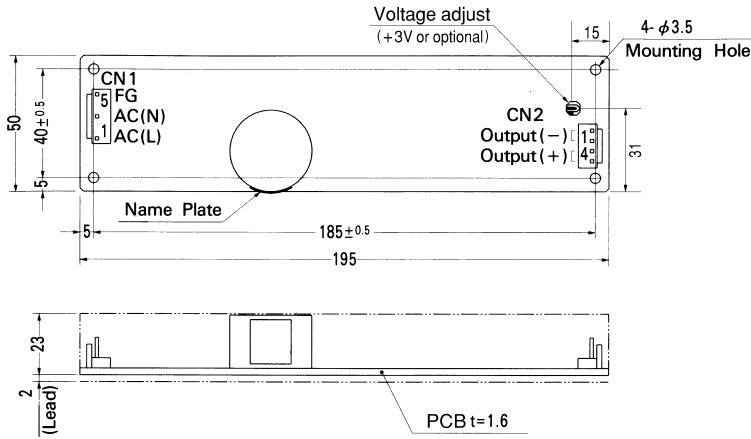
	MODEL	LCA50S-3	LCA50S-5	LCA50S-12	LCA50S-15	LCA50S-24	LCA50S-24-H	LCA50S-36	LCA50S-48	
INPUT	VOLTAGE[V]	AC85 - 132 1 φ or DC110 - 170								
	CURRENT[A]	ACIN 100V 1.3typ (Io=100%)								
	FREQUENCY[Hz]	47 - 440 or DC								
	EFFICIENCY[%]	71typ	78typ	80typ	81typ	82typ	82typ	82typ	82typ	
	INRUSH CURRENT[A]	ACIN 100V 30typ (Io=100%) (At cold start)								
	LEAKAGE CURRENT[ma]	0.5max (60Hz, According to UL, CSA and DEN-AN)								
OUTPUT	VOLTAGE[V]	3	5	12	15	24	24	36	48	
	CURRENT[A]	*3 10	10	4.3	3.5	2.5	2.5 (Peak 3)	1.7	1.3	
	LINE REGULATION[mV]	20max	20max	48max	60max	96max	96max	144max	192max	
	LOAD REGULATION[mV]	40max	40max	100max	120max	150max	150max	240max	300max	
	RIPPLE[mVp-p]	0 to +50°C *1	80max	80max	120max	120max	120max	120max	150max	150max
		-10 - 0°C *1	140max	140max	160max	160max	160max	160max	200max	200max
	RIPPLE NOISE[mVp-p]	0 to +50°C *1	120max	120max	150max	150max	150max	150max	250max	350max
		-10 - 0°C *1	160max	160max	180max	180max	180max	180max	300max	400max
	TEMPERATURE REGULATION[mV]	0 to +50°C	50max	50max	120max	150max	240max	240max	360max	480max
		-10 to +50°C	60max	60max	150max	180max	290max	290max	450max	600max
	DRIFT[mV]	*2 20max	20max	48max	60max	96max	96max	144max	192max	
	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 ADJUSTMENT RANGE[V]	2.85 - 3.6	Fixed ("Y"which can be adjusted the output is available as optional: 5, 12, 15, 24, 36, 48V ±10%)								
OUTPUT VOLTAGE SETTING[V]	—	4.9 - 5.3	11.5 - 12.5	14.4 - 15.6	23.0 - 25.0	23.0 - 25.0	34.5 - 37.5	46.0 - 50.0		
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating (works over 105% of peak current at option -H) and recovers automatically								
	OVERVOLTAGE PROTECTION	4.00 - 5.25V	Works at 115 - 140% of rating							
	OPERATING INDICATION	Not provided								
	REMOTE SENSING	Not provided								
ISOLATION	REMOTE ON/OFF	Not provided								
	INPUT-OUTPUT	AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)								
	INPUT-FG	AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)								
ENVIRONMENT	OUTPUT-FG	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)								
	OPERATING TEMP., HUMID. AND ALTITUDE	-10 to +60°C, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max								
	STORAGE TEMP., HUMID. AND ALTITUDE	-20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max								
SAFETY AND NOISE REGULATIONS	VIBRATION	10 - 55Hz, 19.6m/s ² (2G), 3minutes period, 60minutes each along X, Y and Z axis								
	IMPACT	196.1m/s ² (20G), 11ms, once each X, Y and Z axis								
OTHERS	AGENCY APPROVALS	UL60950-1, CSA C22.2 No.234 Complies with DEN-AN								
	CONDUCTED NOISE	Complies with FCC-B, VCCI-B								
OTHERS	CASE SIZE/WEIGHT	50 x 25 x 195mm (W x H x D) / 200g max								
	COOLING METHOD	Convection								

*1 Measured by 20MHz oscilloscope or Ripple-Noise meter (equivalent to KEISOKU-GIKEN : RM101).

*2 Drift is the change 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.

*3 Peak load for 10 sec. or less is acceptable (The average current has to be less than the rated current).

External view



I/O Connector	Mating Connector	Terminal
CN1	B3P5-VH	VHR-5N Chain: SVH-21T-P1.1 Loose: BVH-21T-P1.1
CN2	B4P-VH	VHR-4N Chain: SVH-21T-P1.1 Loose: BVH-21T-P1.1

(Mfr.: J.S.T.)

<PIN CONNECTION>

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

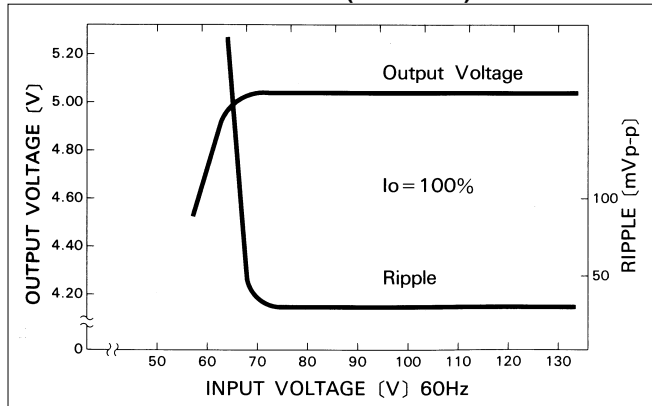
Pin No.	Output
1 · 2	-V
3 · 4	+V

※Maximum 5A per pin of CN2 can be applied.

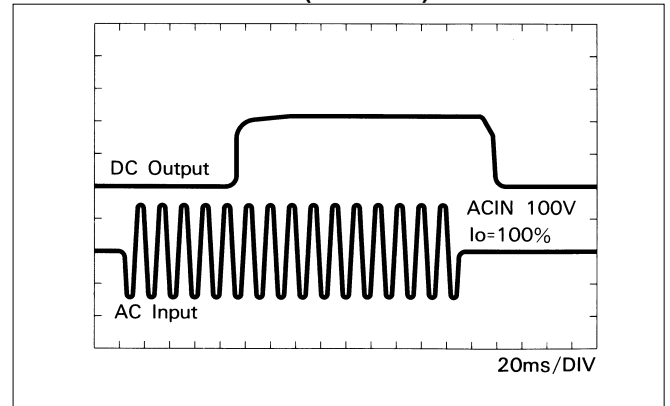
- ※Weight : 200g or less
- ※Tolerance : ±1
- ※Dimensions in mm.
- ※PCB Material : Glass composite (CEM3)

Performance data

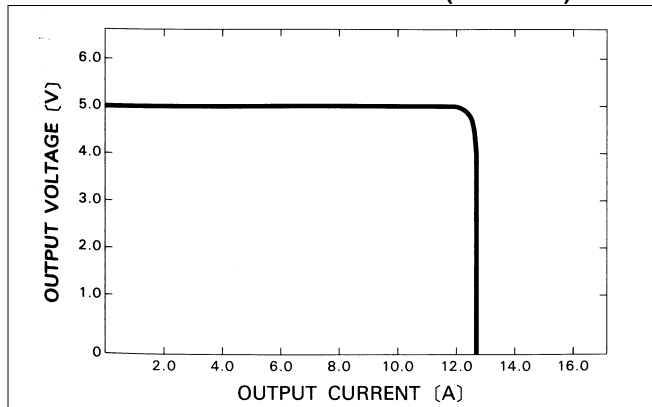
■STATIC CHARACTERISTICS (LCA50S-5)



■RISE TIME & FALL TIME (LCA50S-5)



■OVERCURRENT CHARACTERISTICS (LCA50S-5)



■DERATING CURVE

