

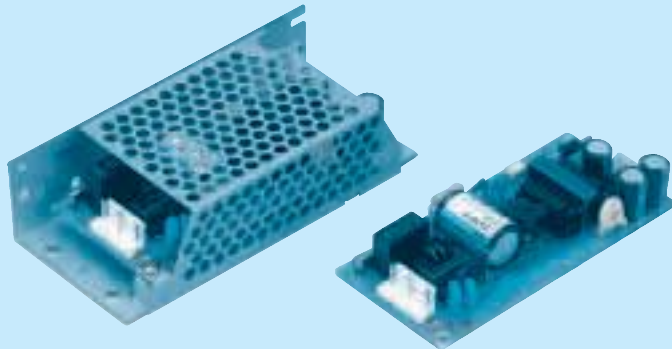
AC-DC Power Supplies Open Frame/Enclosed type

LDA10F

Ordering information

LDA 10 F -5 -□

① ② ③ ④ ⑤



Recommended EMI/EMC Filter
NAC-06-472



High voltage pulse noise type : NAP series
Low leakage current type : NAM series
* The EMI/EMC Filter is recommended to connect with several devices.

- ① Series name
- ② Output wattage
- ③ Universal input
- ④ Output voltage
- ⑤ Optional *2
- C :with Coating
- G :Low leakage current
- S :with Chassis
- SN :with Chassis & cover
- Y :with Potentiometer

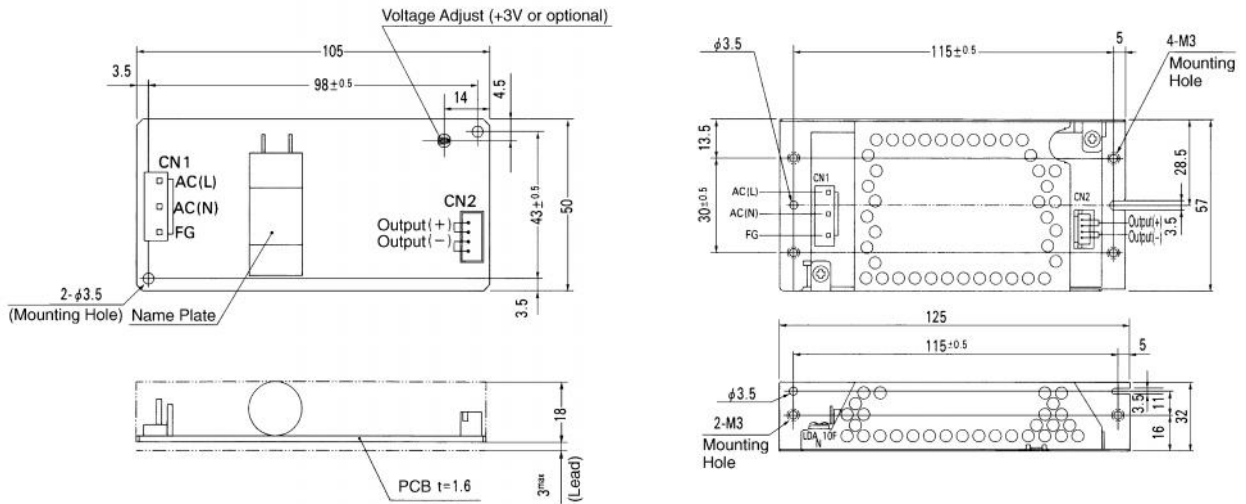
| MODEL | LDA10F-3 | LDA10F-5 | LDA10F-12 | LDA10F-15 | LDA10F-24 |
|-----------------------|----------|----------|-----------|-----------|-----------|
| MAX OUTPUT WATTAGE[W] | 6 | 10 | 10.8 | 10.5 | 12 |
| DC OUTPUT | 3V 2.0A | 5V 2.0A | 12V 0.9A | 15V 0.7A | 24V 0.5A |

SPECIFICATIONS

| | MODEL | LDA10F-3 | LDA10F-5 | LDA10F-12 | LDA10F-15 | LDA10F-24 | |
|-------------------------------|------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------|-------------|-----------|--------|
| INPUT | VOLTAGE[V] | AC85 - 264 1 φ or DC110 - 370 | | | | | |
| | CURRENT[A] | ACIN 100V | 0.25typ (Io=100%) | | | | |
| | | ACIN 200V | 0.16typ (Io=100%) | | | | |
| | FREQUENCY[Hz] | 47 - 440 or DC | | | | | |
| | EFFICIENCY[%] | 68typ | 72typ | 74typ | 74typ | 78typ | |
| | INRUSH CURRENT[A] | ACIN 100V | 15typ (Io=100%) (At cold start) | | | | |
| | | ACIN 200V | 30typ (Io=100%) (At cold start) | | | | |
| LEAKAGE CURRENT[ma] | 0.75max (60Hz, According to UL, CSA, VDE and DEN-AN) | | | | | | |
| OUTPUT | VOLTAGE[V] | 3 | 5 | 12 | 15 | 24 | |
| | CURRENT[A] | 2 | 2 | 0.9 | 0.7 | 0.5 | |
| | LINE REGULATION[mV] | 20max | 20max | 48max | 60max | 96max | |
| | LOAD REGULATION[mV] | 40max | 40max | 100max | 120max | 150max | |
| | RIPPLE[mVp-p] | 0 to +50°C | 80max | 80max | 120max | 120max | 120max |
| | | -10 - 0°C | 140max | 140max | 160max | 160max | 160max |
| | RIPPLE NOISE[mVp-p] | 0 to +50°C | 120max | 120max | 150max | 150max | 150max |
| | | -10 - 0°C | 160max | 160max | 180max | 180max | 180max |
| | TEMPERATURE REGULATION[mV] | 50max | 50max | 120max | 150max | 240max | |
| | DRIFT[mV] | *1 20max | 20max | 48max | 60max | 96max | |
| | START-UP TIME[ms] | 200max (ACIN 100V, Io=100%) | | | | | |
| | HOLD-UP TIME[ms] | 10typ (ACIN 85V, Io=100%) 20typ (ACIN 100V, Io=100%) 100typ (ACIN 200V, Io=100%) | | | | | |
| | OUTPUT VOLTAGE ADJUSTMENT RANGE[V] | 2.85 - 3.6 | Fixed ("Y" which can be adjusted the output is available as option :5, 12, 15, 24V ±10%) | | | | |
| OUTPUT VOLTAGE SETTING[V] | — | 4.9 - 5.3 | 11.5 - 12.5 | 14.4 - 15.6 | 23.0 - 25.0 | | |
| PROTECTION CIRCUIT AND OTHERS | OVERCURRENT PROTECTION | Works over 105% of rating and recovers automatically | | | | | |
| | OVERVOLTAGE PROTECTION | 4.00V min | Works over 115% of rating, by zener diode clamping | | | | |
| | OPERATING INDICATION | Not provided | | | | | |
| | REMOTE SENSING | Not provided | | | | | |
| ISOLATION | REMOTE ON/OFF | Not provided | | | | | |
| | INPUT-OUTPUT | 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) | | | | | |
| 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 | | | | | |
| | VIBRATION | 10 - 55Hz, 19.6m/s ² (2G), 3minutes period, 60minutes each along X, Y and Z axis | | | | | |
| SAFETY AND NOISE REGULATIONS | IMPACT | 196.1m/s ² (20G), 11ms, once each X, Y and Z axis | | | | | |
| | AGENCY APPROVALS | UL60950-1, EN60950-1, EN50178, CSA C22.2 No.60950-1 Complies with DEN-AN and IEC60950-1 | | | | | |
| | CONDUCTED NOISE | Complies with FCC-B, CISPR22-B, EN55022-B, VCCI-B | | | | | |
| OTHERS | CASE SIZE/WEIGHT | 50X21X105mm (WxHxD) /75g max (without chassis and cover) | | | | | |
| | COOLING METHOD | Convection | | | | | |

*1 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.
 *2 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 chassis and cover.

External view



| I/O Connector | Mating Connector | Terminal |
|---------------|------------------|---------------------|
| CN1 | B3P5-VH | VHR-5N |
| | | Chain:SVH-21T-P1.1 |
| | | Loose:BVH-21T-P1.1 |
| CN2 | B4B-XH-A | XHP-4 |
| | | Chain:BXH-001T-P0.6 |
| | | Loose:BXH-001T-P0.6 |

(Mfr : J.S.T.)

<PIN CONNECTION>

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

| Pin No. | Output |
|---------|--------|
| 1 | -V |
| 2 | -V |
| 3 | +V |
| 4 | +V |

※ Keep drawing current per pin below 2A for CN2.

※ Weight : 75g or less (Without chassis and cover)

※ Tolerance : ± 1

※ Dimensions in mm.

※ PCB Material : Glass composite (CEM3)

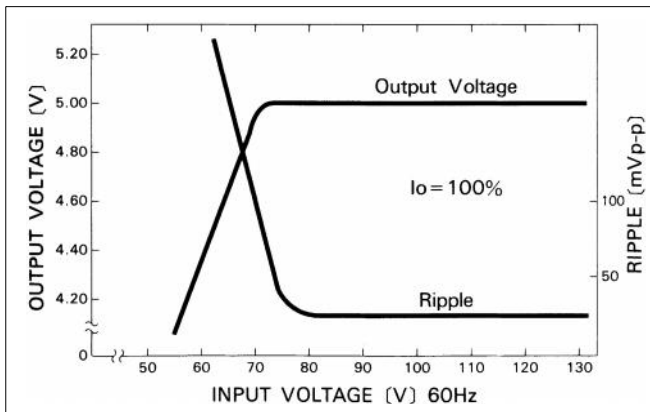
※ Chassis and cover is optional.

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

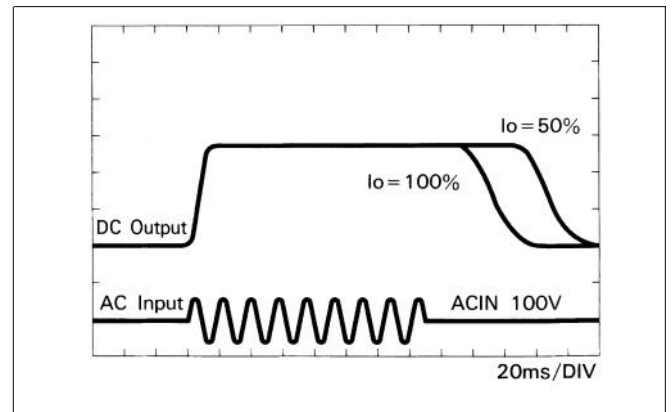
LDA

Performance data

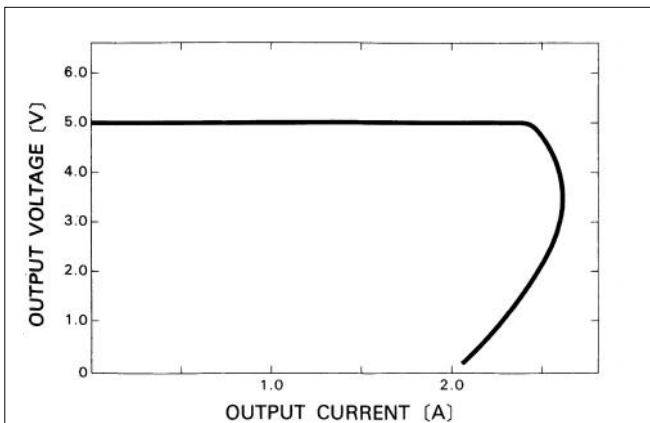
■ STATIC CHARACTERISTICS (LDA10F-5)



■ RISE TIME & FALL TIME (LDA10F-5)



■ OVERCURRENT CHARACTERISTICS (LDA10F-5)



■ DERATING CURVE

