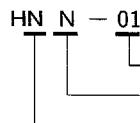


**SWITCHING POWER SUPPLY****LCD/DC-DC CONVERTER HN-HW SERIES****ORDERING CODE**

Output Voltage 01=-24.0V 02=-23.0V 03=-22.0V  
 Remote Control N=None H=(Active Hi) L=(Active Lo)  
 Input Voltage N=4.5V~5.5V W=10~25V

**FEATURES**

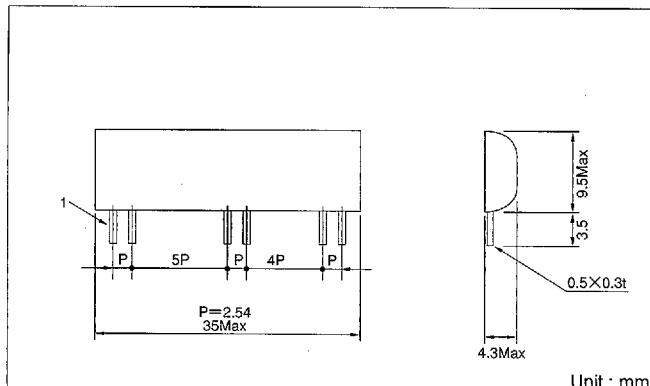
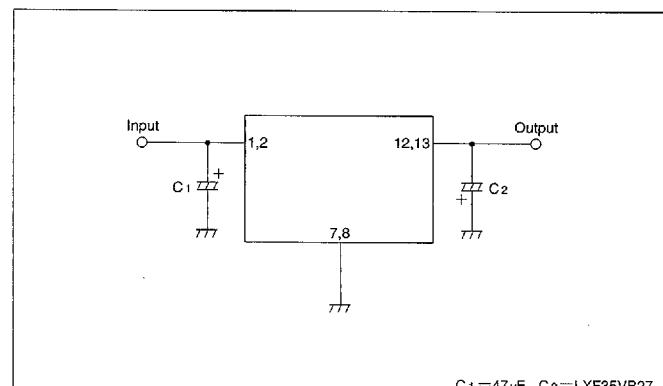
- DC-DC converter for STN LCD bias supply
- High efficiency/low leakage current (w/remote Control function)
- SIP configuration allows efficient use of board space
- Range selection is available
- Wide-range input models w/remote control function are available

**STANDARD SPECIFICATIONS**

Operating temperature range: 0~+60°C  
 Storage temperature range: -20~+80°C  
 Humidity: MAX 95% RH  
 Load regulation range: 0~100%

**+5V INPUT HNN-0□ type**

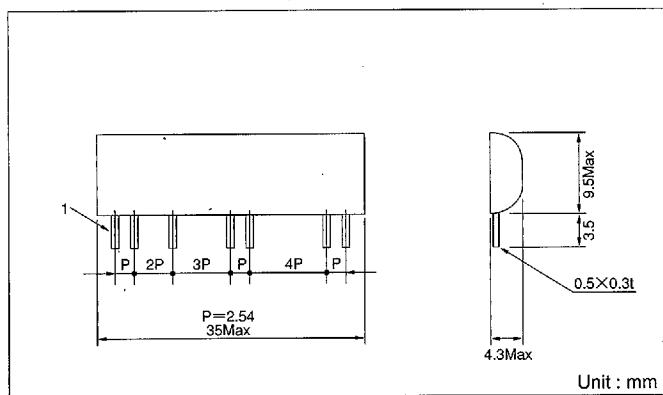
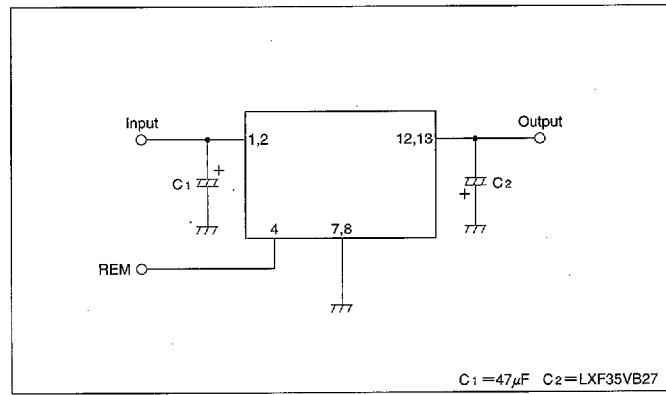
Ordering code	Input voltage [Vdc]	Output voltage [Vdc]	Output current [A]	Total regulation [%] MAX	Ripple voltage [mV] P-P	Efficiency [%] MIN
HNN-01	4.5~5.5	-24	0.02	$\pm 5.0$	200	70
HNN-02		-23	0.02			
HNN-03		-22	0.02			

**OUTSIDE DIMENSIONS****CONNECTION**

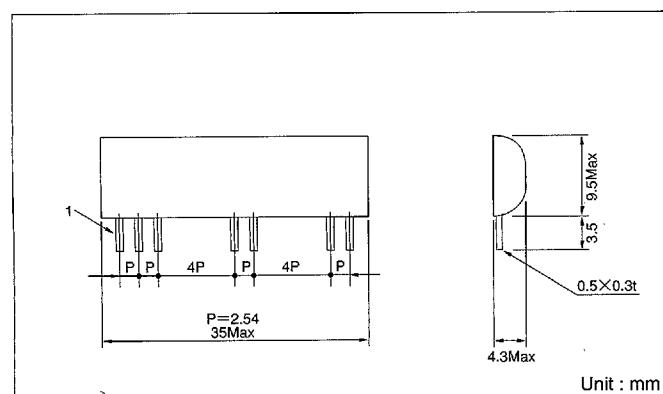
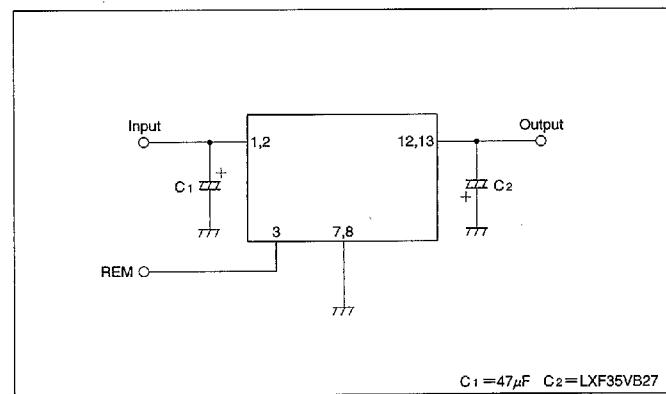
Note: If washing of the parts is required, please consult with us.

**SWITCHING POWER SUPPLY****LCD/DC-DC CONVERTER HN SERIES****+5V INPUT w/ON/OFF FUNCTION (RMT=ACTIVE HI) HNH-0□ type**

Ordering code	Input voltage [Vdc]	Output voltage [Vdc]	Output current [A]	Total regulation [%] MAX	Ripple voltage [mV] P-P	Efficiency [%] MIN
HNH-01	4.5~5.5	-24	0.02	±5.0	200	70
HNH-02		-23	0.02			
HNH-03		-22	0.02			

**OUTSIDE DIMENSIONS****CONNECTION****+5V INPUT w/ON/OFF FUNCTION (RMT=ACTIVE LO) HNL-0□ type**

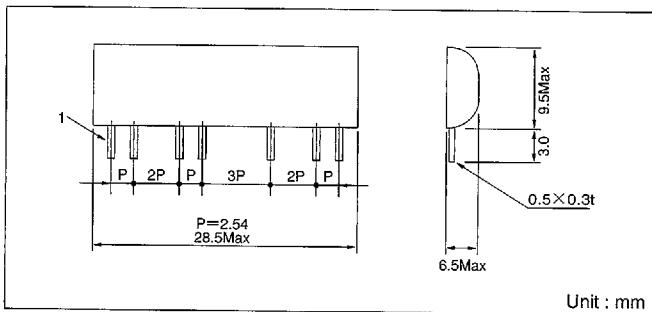
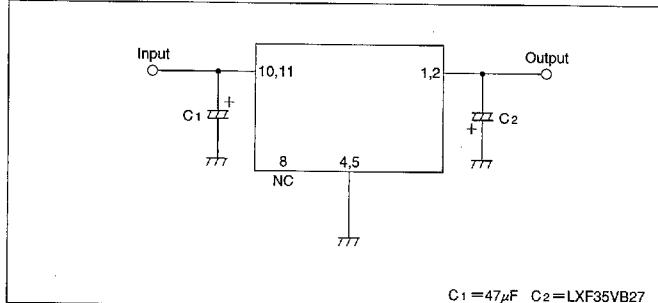
Ordering code	Input voltage [Vdc]	Output voltage [Vdc]	Output current [A]	Total regulation [%] MAX	Ripple voltage [mV] P-P	Efficiency [%] MIN
HNL-01	4.5~5.5	-24	0.02	±5.0	200	70
HNL-02		-23	0.02			
HNL-03		-22	0.02			

**OUTSIDE DIMENSIONS****CONNECTION**

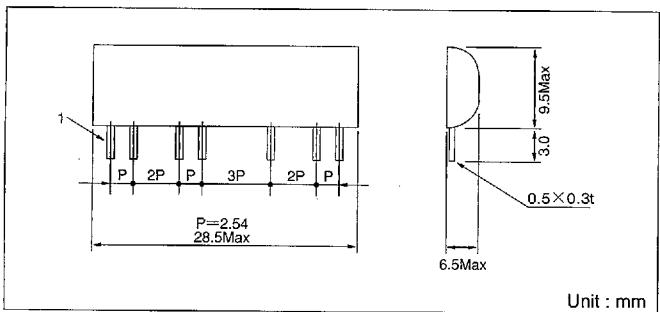
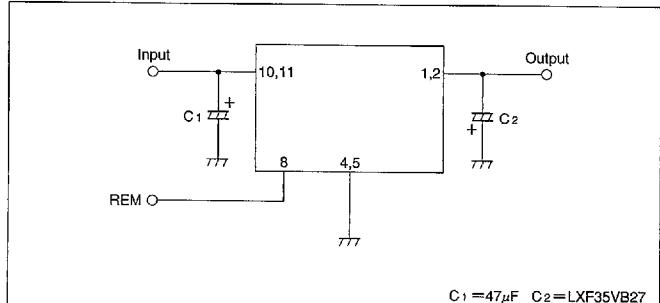
Note: If washing of the parts is required, please consult with us.

**SWITCHING POWER SUPPLY****LCD/DC-DC CONVERTER HW SERIES****WIDE RANGE INPUT HWN-0□ type**

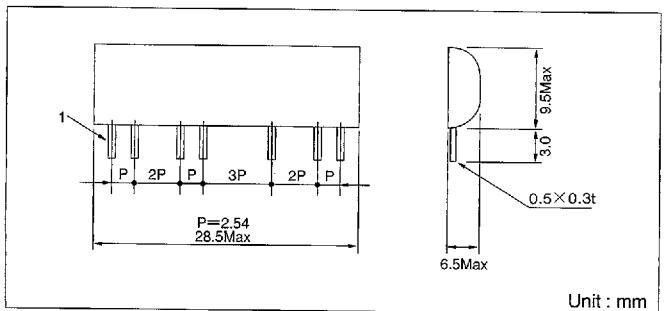
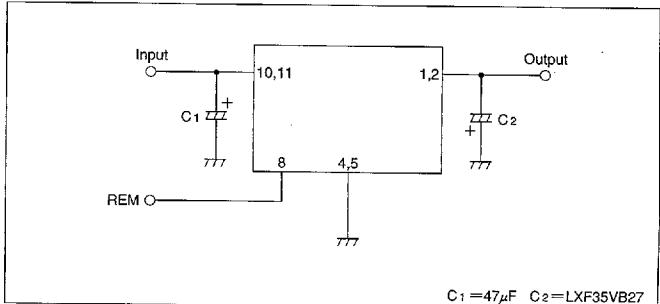
Ordering code	Input voltage [Vdc]	Output voltage [Vdc]	Output current [A]	Total regulation [%] MAX	Ripple voltage [mV] P-P	Efficiency [%] MIN
HWN-01	10~25	-24	0.03	±5.0	200	(Vin ≥ 15V)
HWN-02		-23	0.03			
HWN-03		-22	0.03			

**OUTSIDE DIMENSIONS****CONNECTION****WIDE RANGE INPUT w/ ON/OFF FUNCTION (RMT=ACTIVE HI) HWH-0□ type**

Ordering code	Input voltage [Vdc]	Output voltage [Vdc]	Output current [A]	Total regulation [%] MAX	Ripple voltage [mV] P-P	Efficiency [%] MIN
HWH-01	10~25	-24	0.03	±5.0	200	(Vin ≥ 15V)
HWH-02		-23	0.03			
HWH-03		-22	0.03			

**OUTSIDE DIMENSIONS****CONNECTION****WIDE RANGE INPUT w/ ON/OFF FUNCTION (RMT=ACTIVE LO) HWL-0□ type**

Ordering code	Input voltage [Vdc]	Output voltage [Vdc]	Output current [A]	Total regulation [%] MAX	Ripple voltage [mV] P-P	Efficiency [%] MIN
HWL-01	10~25	-24	0.03	±5.0	200	(Vin ≥ 15V)
HWL-02		-23	0.03			
HWL-03		-22	0.03			

**OUTSIDE DIMENSIONS****CONNECTION**

Note: If washing of the parts is required, please consult with us.