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UNLESS OTHERWISE SPECIFIED UNITS ARE IN MILLIMETERS (mm)		ANGLES:		RESISTOR FACILITY FOR PROOT. DIM. MAINTENANCE	
TOLERANCES ARE:		APPROVED BY:		DATE:	
FRACTIONS:		CHECKED BY:		DATE:	
REV. ZONE		DESCRIPTION OF CHANGE (ECN NO.)		DATE	
A		PRODUCTION RELEASE		08.21.96	
B		97N2204 ADDED NEW FUSE TO BOM		09.24.97	
C		97N2204D ADD AUTOMATION NOTE FOR D109 AND R111		10.07.97	

DATE	10.07.97
BY	JW
DATE	08.21.96
BY	DN

SIZE	LTN
PART NO.	98-221-094-00
DWG NO.	98-221-094
REV.	C

SCALE	NTS
DATE	10.07.97
SHEET	1 OF 1

PCB ASSEMBLY (HFL-120-1/40 RS)
PHILIPS 12NC

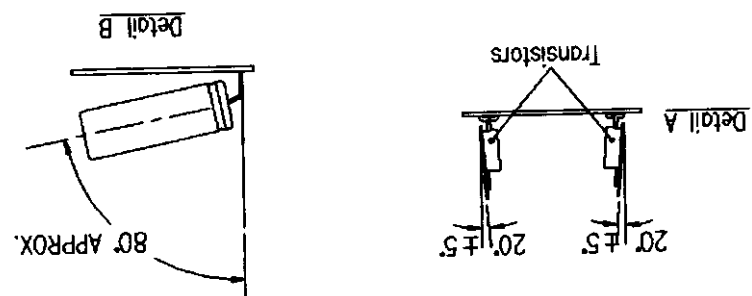
ADVANCE
10275 WEST HIGGINS ROAD
ROSEMONT, ILLINOIS 60018-5603

SEE SEPARATE BOM 98-221-096-00
ASSEMBLY DRAWING

CAUTION
ELECTROSTATIC
DISCHARGE SENSITIVE

Autoinsert D109 Zener
into R111 position and
manually insert R111.

Use grounding strap
when handling this
device.



- 1. Use automatic insertion machine for small axial and/or radial leaded components.
- 2. Manually insert capacitors and varistors.
- 3. For electrolytic capacitors and diodes, check for pin designations, color codes and assembly orientations.
- 4. For all sub-assemblies inserted, check for pin designations, color codes and assembly orientations.
- 5. Check for proper color codes and length of lead wires.
- 6. When all components and assemblies are inserted, run assembly thru soldering conveyor, flux and dip soldering.
- 7. Trim excess leads after wave soldering.
- 8. Visually inspect component and trace sides.
- 9. Do touch-up and repair if necessary.
- 10. Perform electrical tests according to test specification sheet.
- 11. For Test parameter, refer to 87-201-140.
- 12. For Circuit schematic, refer to 89-201-140.
- 13. Component C2 is bent inward approximately 80° (see detail A). See drawing 86-001-006 figure 1 for preforming.
- 14. Transistors assembly should be bent inwards at an angle of not more than 25° (see Detail A).
- 15. Insert Q103 with connected pins facing R103/D107.
- 16. Place jumper wire into R110 position.

ENGINEERING PROCESS INSTRUCTIONS:

1. Use automatic insertion machine for small axial and/or radial leaded components.

2. Manually insert capacitors and varistors.

3. For electrolytic capacitors and diodes, take note of polarity, color codes and assembly orientations.

4. For all sub-assemblies inserted, check for pin designations, color codes and assembly orientations.

5. Check for proper color codes and length of lead wires.

6. When all components and assemblies are inserted, run assembly thru soldering conveyor, flux and dip soldering.

7. Trim excess leads after wave soldering.

8. Visually inspect component and trace sides.

9. Do touch-up and repair if necessary.

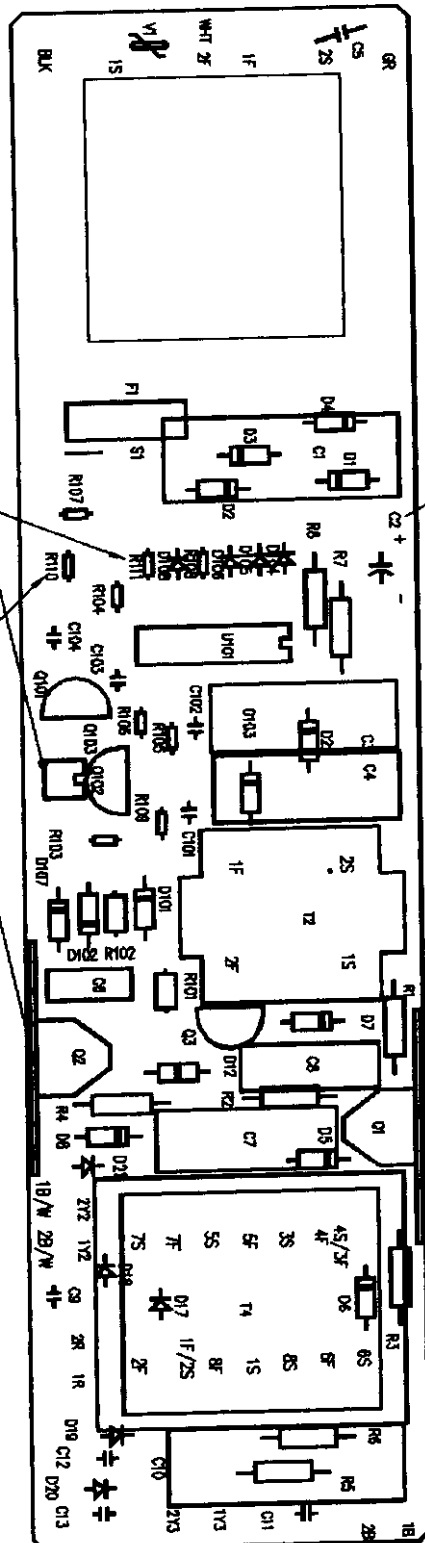
10. Perform electrical tests according to test specification sheet.

11. For Test parameter, refer to 87-201-140.

12. For Circuit schematic, refer to 89-201-140.

13. Component C2 is bent inward approximately 80° (see detail A). See drawing 86-001-006 figure 1 for preforming.

14. Transistors assembly should be bent inwards at an angle of not more than 25° (see Detail A).

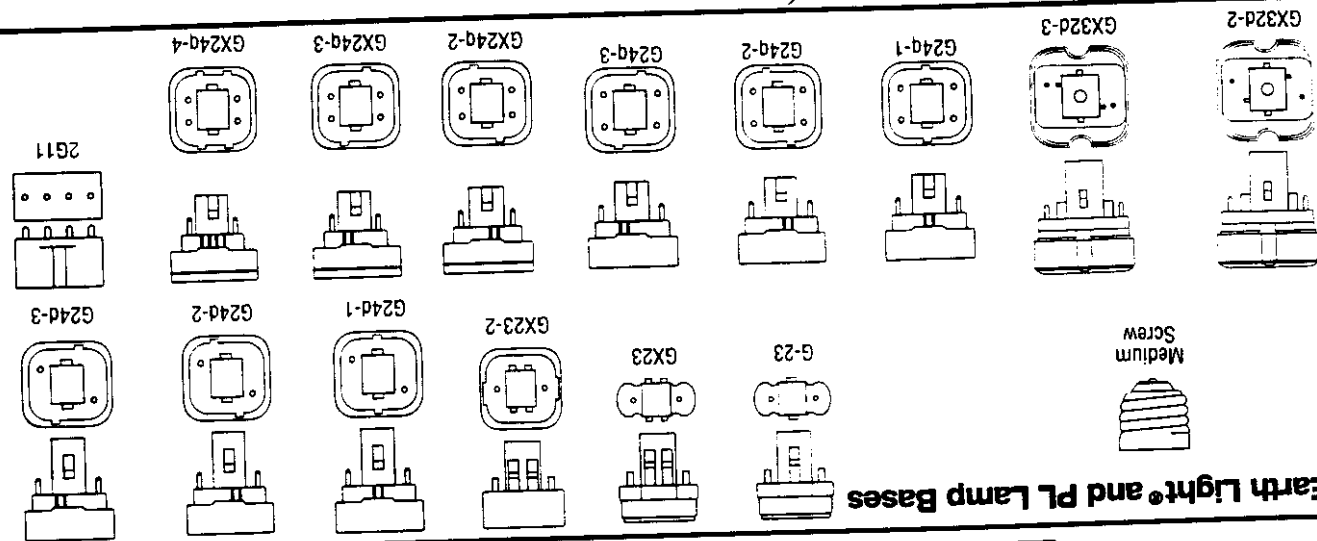


ATC HQ
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ATC

Earth Light® and PL Lamp Bases



Medium Screw



SSS — Energy Saving Product

High Color Rendering Lamps

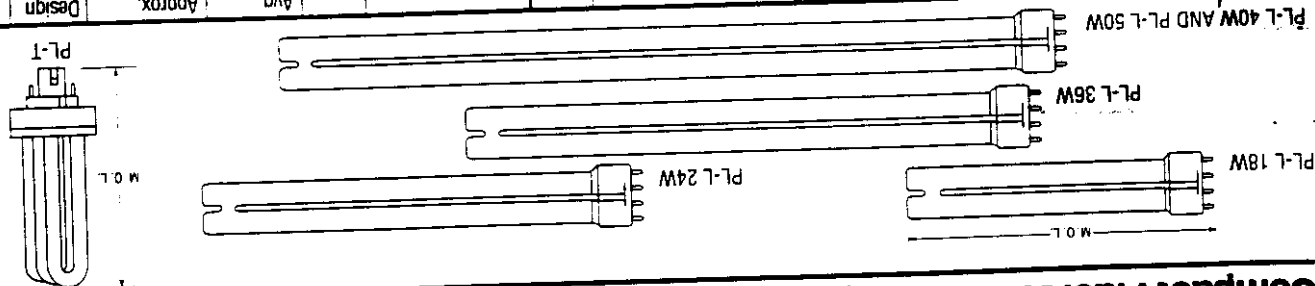
PL Triple 4 pin Fluorescent Lamps	PL-T 42W/41AP	PL-T 42W/35AP	PL-T 42W/30AP	PL-T 32W/41AP	PL-T 32W/35AP	PL-T 32W/30AP	PL-T 28W/41AP	PL-T 28W/35AP	PL-T 28W/30AP	PL-T 18W/41AP	PL-T 18W/35AP	PL-T 18W/30AP
42	22134-1	22126-7	22125-9	35367-2	34744-3	34743-5	35368-4	34742-7	34741-9	35369-1	34740-2	35370-3
32	35367-2	34744-3	34743-5	35368-4	34742-7	34741-9	35369-1	34740-2	35370-3	35371-5	34739-4	35372-6
26	35371-5	34739-4	35372-6	35373-8	34738-1	35374-0	35375-2	34736-3	35376-4	35377-6	34735-5	35378-8
18	35378-8	34735-5	35379-0	35380-2	34734-7	35381-4	35382-6	34733-9	35383-1	35384-3	34732-1	35385-5
	22224-0	22225-1	22226-2	22227-3	22228-4	22229-5	22230-6	22231-7	22232-8	22233-9	22234-0	22235-1
	PL-T 42W/41AP	PL-T 42W/35AP	PL-T 42W/30AP	PL-T 32W/41AP	PL-T 32W/35AP	PL-T 32W/30AP	PL-T 28W/41AP	PL-T 28W/35AP	PL-T 28W/30AP	PL-T 18W/41AP	PL-T 18W/35AP	PL-T 18W/30AP
	4100K	3500K	3000K	4100K	3500K	3000K	4100K	3500K	3000K	4100K	3500K	3000K
	24	24	24	24	24	24	24	24	24	24	24	24
	FM42W/GX24/41	FM42W/GX24/35	FM42W/GX24/30	FM32W/GX24/41	FM32W/GX24/35	FM32W/GX24/30	FM28W/GX24/41	FM28W/GX24/35	FM28W/GX24/30	FM18W/GX24/41	FM18W/GX24/35	FM18W/GX24/30
	4100K	3500K	3000K	4100K	3500K	3000K	4100K	3500K	3000K	4100K	3500K	3000K
	6%	6%	6%	5 1/2%	5 1/2%	5 1/2%	4 7/8%	4 7/8%	4 7/8%	4 7/8%	4 7/8%	4 7/8%
	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
	3200	3200	3200	2400	2400	2400	1800	1800	1800	1200	1200	1200
	2560	2560	2560	1920	1920	1920	1440	1440	1440	960	960	960
	82	82	82	82	82	82	82	82	82	82	82	82

High color rendering, high efficacy lamps feature 4 pin base for use with preheat, rapid start, electronic and dimming circuits.

PL Long Fluorescent Lamps	PL-L 18W/30	PL-L 18W/41	PL-L 24W/30	PL-L 24W/41	PL-L 36W/30	PL-L 36W/41	PL-L 40W/30	PL-L 40W/41	PL-L 50W/30	PL-L 50W/41
18	34500-9	34501-7	34505-8	34506-2	34511-6	34512-3	34513-2	34514-1	34515-0	34516-9
24	34505-8	34506-2	34511-6	34512-3	34513-2	34514-1	34515-0	34516-9	34517-8	34518-7
36	34511-6	34512-3	34513-2	34514-1	34515-0	34516-9	34517-8	34518-7	34519-6	34520-5
38	34519-6	34520-5	34521-4	34522-3	34523-2	34524-1	34525-0	34526-9	34527-8	34528-7
50	34528-7	34529-6	34530-5	34531-4	34532-3	34533-2	34534-1	34535-0	34536-9	34537-8
	PL-L 18W/30	PL-L 18W/41	PL-L 24W/30	PL-L 24W/41	PL-L 36W/30	PL-L 36W/41	PL-L 40W/30	PL-L 40W/41	PL-L 50W/30	PL-L 50W/41
	3000K	4100K	3000K	4100K	3000K	4100K	3000K	4100K	3000K	4100K
	25	25	25	25	25	25	25	25	25	25
	FT18W/G21/30	FT18W/G21/41	FT24W/G21/30	FT24W/G21/41	FT36W/G21/30	FT36W/G21/41	FT40W/G21/30	FT40W/G21/41	FT50W/G21/30	FT50W/G21/41
	3000K	4100K	3000K	4100K	3000K	4100K	3000K	4100K	3000K	4100K
	8 1/2%	8 1/2%	12 1/2%	12 1/2%	16 1/2%	16 1/2%	22 1/2%	22 1/2%	22 1/2%	22 1/2%
	12,000	12,000	12,000	12,000	12,000	12,000	20,000	20,000	14,000	14,000
	1250	1250	1800	1800	2900	2900	3300	3300	4300	4300
	1125	1125	1620	1620	2610	2610	2970	2970	3870	3870
	82	82	82	82	82	82	82	82	82	82

High color rendering, high efficacy lamps feature 4 pin base for use with preheat, rapid start, electronic and dimming circuits.

Product Number	Ordering Code	Genie	Pkg.	Description	M.O.L. (in.)	Avg. Life Hrs. (202)	Approx. Initial (203) Lumens	Design CRI (208)
046677-								



Compact Fluorescent Lamps