



Short Form Catalogue of SEL Neon Lamps

Cat. No. SEL-NEWT-SF-01

Lamp Drawing	Dimensions ØxL (mm)	Strike-Voltage Volts Max. AC	Design Current (mA)	Series Carbon Film Resistor		Average Life (Hrs.)	Solitronics Part No.
				115V	230V		
<b>STANDARD-BRIGHTNESS SB-SERIES (NE-2)</b>							
	4Øx10.5	65V	0.50mA	100K-120K	330K-390K	50,000+	NE410/30SB
	6Øx12.5	65V	0.50mA	100K-120K	330K-390K	50,000+	NE612/30SB
	6Øx13.0	65V	0.50mA	100K-120K	330K-390K	50,000+	NE613/30SB
	6Øx16.0	65V	0.50mA	100K-120K	330K-390K	50,000+	NE616/30SB
	6Øx18.0	65V	0.50mA	100K-120K	330K-390K	50,000+	NE618/30SB
<b>HIGH-BRIGHTNESS HB-1 SERIES (NE2-C)</b>							
	4Øx10.5	65V	0.70mA	82K	220K	25,000+	NE410/30HB-1
	6Øx12.5	65V	0.80mA	68K-82K	180K-220K	25,000+	NE612/30HB-1
	6Øx13.0	65V	0.80mA	68K-82K	180K-220K	25,000+	NE613/30HB-1
	6Øx16.0	65V	0.80mA	68K-82K	180K-220K	25,000+	NE616/30HB-1
	6Øx18.0	65V	0.80mA	68K-82K	180K-220K	25,000+	NE618/30HB-1
<b>HIGH-BRIGHTNESS HB-1X SERIES (NE-2CS)</b>							
	4Øx10.5	65V	1.05mA	56K	180K	25,000	NE410/30HB-1X
	6Øx12.5	65V	1.15mA	47K-56K	150K-180K	25,000	NE612/30HB-1X
	6Øx13.0	65V	1.15mA	47K-56K	150K-180K	25,000	NE613/30HB-1X
	6Øx16.0	65V	1.15mA	47K-56K	150K-180K	25,000	NE616/30HB-1X
	6Øx18.0	65V	1.15mA	47K-56K	150K-180K	25,000	NE618/30HB-1X
<b>HIGH-BRIGHTNESS HB SERIES (NE-2H)</b>							
	4Øx10.5	95V	1.35mA	39K	120K	20,000	NE410/30HB
	6Øx12.5	95V	1.50mA	33K	100K	20,000	NE612/30HB
	6Øx13.0	95V	1.50mA	33K	100K	20,000	NE613/30HB
	6Øx16.0	95V	1.50mA	33K	100K	20,000	NE616/30HB
	6Øx18.0	95V	1.50mA	33K	100K	20,000	NE618/30HB

Remarks:

- All 6Ømm lamps are with 3mm lead-spacing to comply with VDE requirement.
- Due to continuous improvement, all data is subjected to change without prior notice.
- All lamps can also be supplied with 25mm, 50mm, 60mm or 67mm lead-length or pre-cut to required lengths.



Note: Special neon-lamp for Japanese and USA market requirements & special-sized neon-lamp are also available upon request.



**Short Form Catalogue of Green-Fluorescent Lamp** Cat. No. SE-NEWT-SF-02

Lamp Drawing	Dimensions ØxL (mm)	Strike-Voltage (Volt) Max.	Design Current (mA)	Carbon-film Series Resistor		Average Life (Hrs.)	Solitronics Part No.
				115V	230V		
<b>GREEN-FLUORESCENT G-1 SERIES (G-SB)</b>							
	4Øx10.5	85V	0.50mA	100K-120K	330K-390K	15,000	NE410/30G-1
	6Øx12.5	85V	0.50mA	100K-120K	330K-390K	20,000	NE612/30G-1
	6Øx13.0	85V	0.50mA	100K-120K	330K-390K	20,000	NE613/30G-1
	6Øx16.0	85V	0.50mA	100K-120K	330K-390K	20,000	NE616/30G-1
	6Øx18.0	85V	0.50mA	100K-120K	330K-390K	20,000	NE618/30G-1
<b>GREEN-FLUORESCENT G-2 SERIES (G-MB)</b>							
	4Øx10.5	85V	0.70mA	82K	220K	15,000	NE410/30G-2
	6Øx12.5	85V	0.80mA	68K-82K	180K-220K	20,000	NE612/30G-2
	6Øx13.0	85V	0.80mA	68K-82K	180K-220K	20,000	NE613/30G-2
	6Øx16.0	85V	0.80mA	68K-82K	180K-220K	20,000	NE616/30G-2
	6Øx18.0	85V	0.80mA	68K-82K	180K-220K	20,000	NE618/30G-2
<b>GREEN-FLUORESCENT G-2X SERIES (G-HB)</b>							
	4Øx10.5	85V	1.05mA	56K	180K	15,000	NE410/30G-2X
	6Øx12.5	85V	1.15mA	47K-56K	150K-180K	20,000	NE612/30G-2X
	6Øx13.0	85V	1.15mA	47K-56K	150K-180K	20,000	NE613/30G-2X
	6Øx16.0	85V	1.15mA	47K-56K	150K-180K	20,000	NE616/30G-2X
	6Øx18.0	85V	1.15mA	47K-56K	150K-180K	20,000	NE618/30G-2X
<b>GREEN-FLUORESCENT G SERIES (G-UHB)</b>							
	4Øx10.5	85V	1.35mA	39K	120K	15,000	NE410/30G
	6Øx12.5	85V	1.60mA	33K	100K	20,000	NE612/30G
	6Øx13.0	85V	1.60mA	33K	100K	20,000	NE613/30G
	6Øx16.0	85V	1.60mA	33K	100K	20,000	NE616/30G
	6Øx18.0	85V	1.60mA	33K	100K	20,000	NE618/30G

- Remarks: a) All 6Ømm lamps are with 3mm lead spacing to comply with VDE requirement.  
 b) Due to continuous improvement, all data is subjected to change without prior notice.  
 c) All lamps are available with 25mm, 50mm, 60mm, 67mm lead-length or pre-cut to required lengths.



Note: Special green or blue fluorescent lamps for Japanese or USA market requirements & special-sized neon-lamps are also available.



# SOLITRONICS ENGINEERING LTD.

TEL: (852) 2730-8145 FAX: (852) 2730-3245 Email: info@solitronics.com

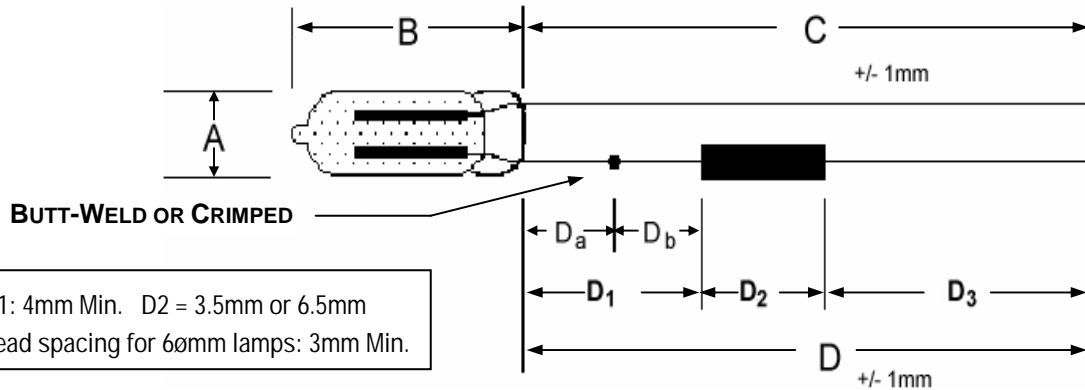
## NEON-LAMP RESISTOR ASSEMBLY (NRA)

Date:

Customer Drawing No. or P/N:

SEL Ref. No.:

### 1. DIMENSIONS



Dimensions	A	B	C	D <sub>a</sub>	D <sub>b</sub>	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	D	± mm
Original (mm)										
Tolerance (mm)										
Revision 1 (mm)										
Revision 2 (mm)										

### 2. JOINT METHOD

Neon Lamp + Resistor by:  Butt-weld  Crimped  Soldering

### 3. NEON-LAMP TYPE

Solitronics Type No.:

- 4ø x 10.5mm
- 6ø x 12.5mm
- 6ø x 13.0mm
- 6ø x 16.0mm
- 6ø x 18.0mm

\* Recommended Types

- \*  **SB** Standard-Brightness 0.3-0.5mA (230V/270K-330K & 110V/100K-120K)
- HB** High-Brightness 1.6mA (230V/100K-120K & 110V/33K-39K)
- \*  **HB-1** High-Brightness (Low starting voltage) 0.7-0.8mA (230V/220K-270K & 110V/68K-82K)
- \*  **HB-1X** High-Brightness (Low starting voltage) 1.05-1.15mA (230V/150K-180K & 110V/47K-56K)
- G** Green-Fluorescent 1.6mA (230V/100K-120K & 110V/33K-39K)
- G-2** Green-Fluorescent 0.7-0.8mA (230V/220K-270K & 110V/68K-82K)
- \*  **G-2X** Green-Fluorescent 1.0-1.2mA (230V/150K-180K & 110V/47K-56K)

SEL/Philips/ERG/VCH


### 4. RESISTOR

Carbon-Film Resistor (CF)          **K ohm**

Wattage  1/6W  For 110/130V  **R** Mini-size Resistor 2.5øx6.5mm with 0.50ø ±0.02mm tin-plated leads

1/4W  For 220/240V  **MR** Micro-size Resistor 2.0øx3.5mm with 0.50ø ±0.02mm tin-plated leads

1/3W  For 330/400V

Metal-Film Resistor (MF)          **K ohm**

1/6W  For 110/130V

1/4W  For 220/240V

1/3W  For 380/400V



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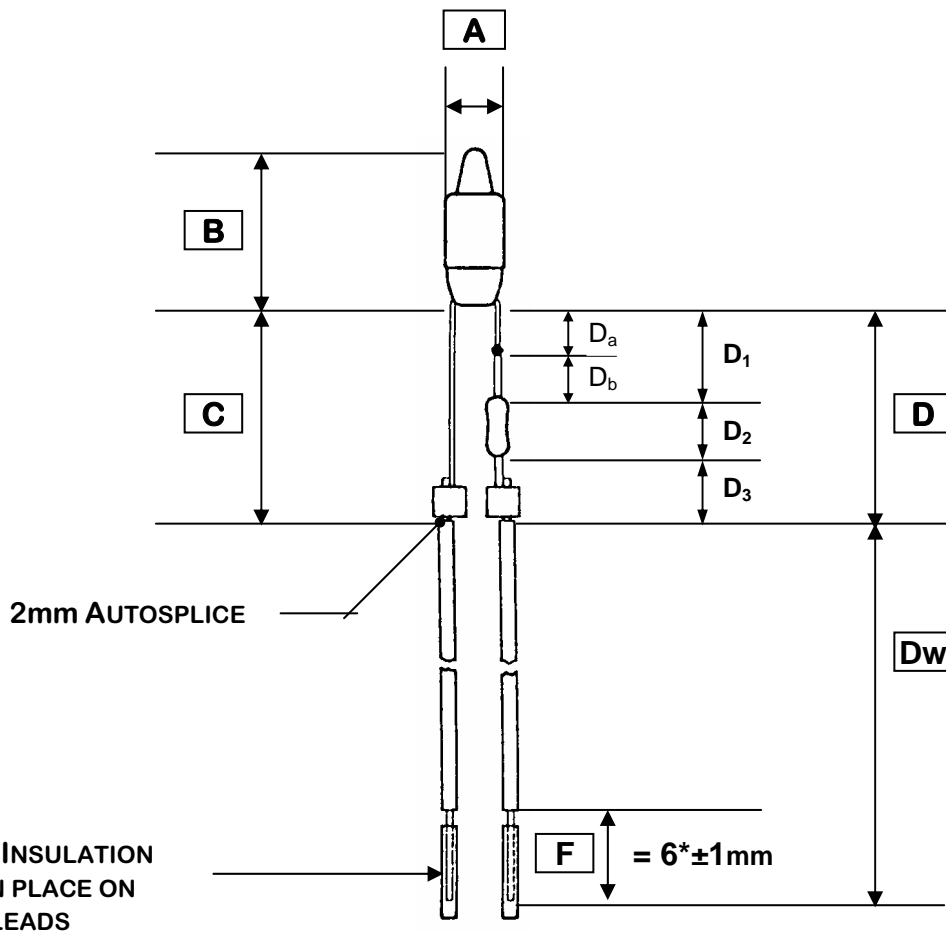
TEL:(852)-2730-8145 FAX:(852)-2730-3245 E-mail: [info@solitronics.com](mailto:info@solitronics.com)

## NEON-LAMP-ASSEMBLY WITH INSULATED WIRE

Date:

Customer Drawing No. or P/N:

SEL Ref. No.:



Neon-lamp Type No.:		Resistor:	
Wire Size: AWG#	18 / 20 / 22 / 24 / 26 ‡	Wire Type:	UL-1007 / UL-1015 ‡
Wire Colour:		Remarks	

‡ Please delete whichever inapplicable.

Dimensions	A	B	C	D <sub>a</sub>	D <sub>b</sub>	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	D	E	F	± mm
Original (mm)												
Tolerance (mm)												
Revision 1 (mm)												
Revision 2 (mm)												



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**Integrated Neon-module with plastic-holder & PVC cable for indicators and electrical appliances**

Date: **13<sup>th</sup> May, 2002**

Group  
**NRAP-V1**

Part Number:  
**SEL-NRAPV1-001-XXXX**

Data Sheet:

**SEL-NRAPV1-001**

**Neon-module for Indicators or appliances**

## 1. Features

Integrated Neon light-module with internal resistor white polycarbonate plastic holder and AWG#24 (11x0.155Ø) 200mm UL/CSA approved UL-1015 T-105°C white 600V PVC cable with 10mm half-end trims.

Also available with friction-fit polycarbonate lens-cap in translucent Red, Amber, Green & Blue for nap-fit on to 9Ø mm panel cut-out.

LED versions for 12V, 24V, 36-48V, 60V AC/DC & 130V AC and 230V AC are also available.

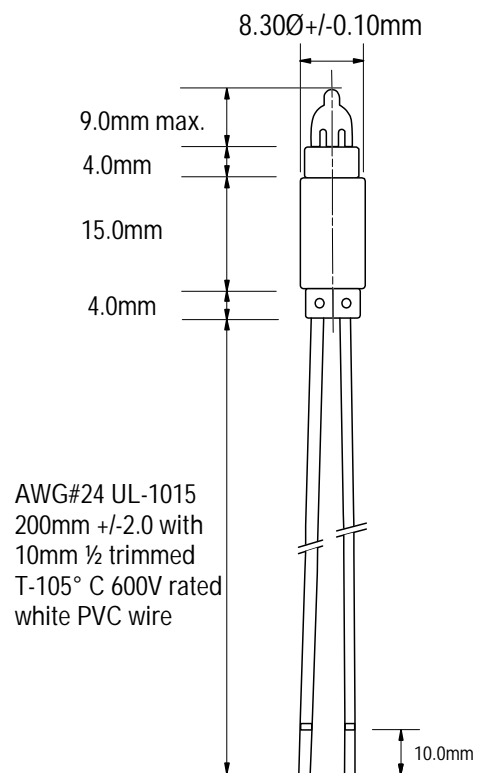
## 2. Construction: -

Plastic Holder (Bezel): GE Lexan polycarbonate

PVC Cable: AWG#24 Stranded 11/0.155Ø NP  
UL-1015 CSA AWM VW-1 white

End trim: 10mm half-trim

Options: *Red, Amber, Green and blue Snap-fit  
Lens-cap for 9.0mmØ panel cut-out*



Solitronics P/N	For Mains voltage & Current	Neon-Lamp/Resistor combination	Strike Voltage	Ex-works price per 1,000 pcs
SEL-NRAPV1-001-HB01	110-125V 1.25mA	NE613/30HB-2+R47K	95V Max.	High-Bright US\$100.00
SEL-NRAPV1-001-MB01	110-125V 1.35mA	NE613/30HB-1X+R47K	65V Max.	Med.Bright US\$100.00
SEL-NRAPV1-001-G201	110-125V 1.25mA	NE613/30G-2X+R47K	85V Max.	Green US\$135.00
SEL-NRAPV1-001-HB02	230-240V 1.25mA	NE613/30HB-2+R150K	95V Max.	High-Bright US\$100.00
SEL-NRAPV1-001-MB02	230-240V 1.35mA	NE613/30HB-1X+R150K	65V Max.	Med.Bright US\$100.00
SEL-NRAPV1-001-G202	230-240V 1.35mA	NE613/30G-2X+R150K	85V Max.	Green US\$135.00

Note: Plastic Holder: Overall Diameter: 8.300±/0.1mm

Smaller-end Diameter: 7.360±/0.02mm (For friction-fit to polycarbonate lens cap)

Blue fluorescent versions available upon request.

LED versions in Red, Amber, Green, Blue also available for 24V to 60V AC/DC & 130V, 240V AC



2nd April 2009

Catalogue No. SEL-NEON-BASED-PC-SF-01

**Plastic Lens Neon Signal Lamp Bulbs for 22mmØ Lighted Push- Button Switches & Pilot Lamps For 110/130V, 220/240V & 380V 50/60Hz AC**

Features:

- Lens-end design focus light to the front-end of the lamp
- Shock-resistant polycarbonate envelope
- High-light output and long-life expectancy 15K-25K Hrs. for Neon & 10K for Green
- Available with neon, green fluorescent and blue fluorescent lamps

RoHS

Configuration	Part No.		Electrical Rating		Standard Packing
	E10	BA9s	Voltage	Current	
<b>T-10x25mm</b>					
	1025-11	1025-12	110/130V	1.8mA ± 0.3	100 pcs/box
	1025-21	1025-22	220/240V	1.8mA ± 0.3	100 pcs/box
	1025-31	1025-32	380V	1.8mA ± 0.3	100 pcs/box
	1025-11G	1025-12G	110/130V	1.8mA ± 0.3	100 pcs/box
	1025-21G	1025-22G	220/240V	1.8mA ± 0.3	100 pcs/box
	1025-31G	1025-32G	380V	1.8mA ± 0.3	100 pcs/box
<b>T-10x28mm</b>					
	1028-11	1028-12	110/130V	1.8mA ± 0.3	100 pcs/box
	1028-21	1028-22	220/240V	1.8mA ± 0.3	100 pcs/box
	1028-31	1028-32	380V	1.8mA ± 0.3	100 pcs/box
	1028-11G	1028-12G	110/130V	1.8mA ± 0.3	100 pcs/box
	1028-21G	1028-22G	220/240V	1.8mA ± 0.3	100 pcs/box
	1028-31G	1028-32G	380V	1.8mA ± 0.3	100 pcs/box
	1028-11B	1028-12B	110/130V	1.8mA ± 0.3	100 pcs/box
	1028-21B	1028-22B	220/240V	1.8mA ± 0.3	100 pcs/box
	1028-31B	1028-32B	380V	1.8mA ± 0.3	100 pcs/box
	—	B1A(NE51)	65V	0.5mA	100 pcs/box
—	B1A(NE51H)	90V	1.5mA	100 pcs/box	
<b>T-14x30-34mm</b>					
	1430-11	1430-12	110/130V	1.8mA ± 0.3	100 pcs/box
	1430-21	1430-22	220/240V	1.8mA ± 0.3	100 pcs/box
	1430-31	1430-32	380V	1.8mA ± 0.3	100 pcs/box
	1430-11G	1430-12G	110/130V	1.8mA ± 0.3	100 pcs/box
	1430-21G	1430-22G	220/240V	1.8mA ± 0.3	100 pcs/box
	1430-31G	1430-32G	380V	1.8mA ± 0.3	100 pcs/box
<b>T-16x52mm</b>					
	1652-11	1652-12	110/130V	1.8mA ± 0.3	100 pcs/box
	1652-21	1652-22	220/240V	1.8mA ± 0.3	100 pcs/box
	1652-31	1652-32	380V	1.8mA ± 0.3	100 pcs/box
	1652-11G	1652-12G	110/130V	1.8mA ± 0.3	100 pcs/box
	1652-21G	1652-22G	220/240V	1.8mA ± 0.3	100 pcs/box
	1652-31G	1652-32G	380V	1.8mA ± 0.3	100 pcs/box

Note: All specifications are subject to change without prior notice. G=Green-Fluorescent B=Blue Fluorescent



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## T-9x16.5mm Lens-end Ring Electrode Wire Terminal Neon-lamp for 115V & 230V $V_s \leq 65V$

Date:

26<sup>th</sup> July 2002

Group 6000:

T-9 GN Series

Part Number:

SEL-T9-16.5-GN-65V-110-230-1068

Data Sheet:

SEL-GN-T9-16.5-26-65V

Strike-Voltage  $V_s = 65V$  Max. Operating-Current  $I_o = 0.80mA$ 

### 1. Features & Application

High Quality Len-end Wire-Ring-Cup-Electrode Neon lamp with 0.35 $\phi$ x26mm non-plated leads For use as indicators for "Ceran" glass ceramic Electric hob cooker tops for 100V (Japan) and 110V-125V (USA) Mains Markets.

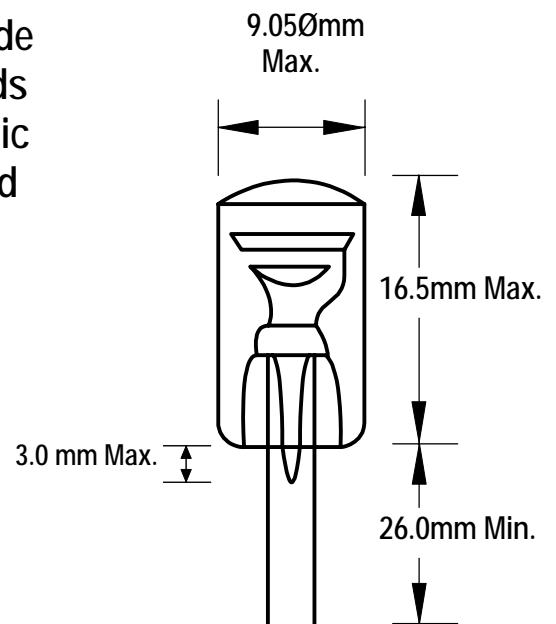
### 2. Physical Dimensions

Lamp diameter: 9.0mm -0.02/+0.05mm

Lamp Length : 16.5mm Max.

Lead Length : 0.35 $\phi$ +/-0.02 x 26.0mm Min.

Seal-tip protrusion: 3.0mm Max.



### 3. Operating Conditions: -

100V 68K 0.75mA 10K Hrs.

115V 68K 0.80mA 10K Hrs.

230V 180K 0.80mA 10K Hrs.

Strike-Voltage  $V_s = 65V$  Max.Solitronics Engineering Ltd. E-mail: [info@solitronics.com](mailto:info@solitronics.com)

Mains-Voltage AC	Volts	100V 50Hz	Strike-Voltage $V_s$	Volts	$V_s = 65V$ max. AC
Series Resistor	K ohm	68K	Wattage	W	1/3W
Current ( $I_o$ )	mA	0.75mA +/- 0.15mA	Life Expectancy	Hrs	12,000 Hrs
Mains-Voltage AC	Volts	115V 50Hz	Strike-Voltage $V_s$	Volts	$V_s = 65V$ max. AC
Series Resistor	K ohm	68K	Wattage	W	1/3W
Current ( $I_o$ )	mA	0.80mA +/- 0.15mA	Life Expectancy	Hrs	12,000 Hrs
Mains-Voltage AC	Volts	230V 50Hz	Strike-Voltage $V_s$	Volts	$V_s = 65V$ max. AC
Series Resistor	K ohm	180K	Wattage	W	1/3W
Current ( $I_o$ )	mA	0.80mA +/- 0.15mA	Life Expectancy	Hrs	12,000 Hrs

**Note: All specifications are subject to change without notice.****Final drawing will be issue with Pro-Forma Invoice at time of ordering.****Nearest equivalent to ERG LG-100 (with performance greatly exceeding ERG LG-100)****Higher Brightness type for 230V equivalent to ERG LG-130 available upon request.**



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## T-9x16.5mm Lens-end Ring Electrode Wire Terminal Neon-lamp for 115V & 230V $V_s \leq 95V$

Date: **26<sup>th</sup> July 2002**

Group 6000:  
T-9 GN Series

Part Number:  
SEL-GN-T9-16.5-26-95V-110-230-1068

Data Sheet:  
**SEL-GN-T9-16.5-26-95V**

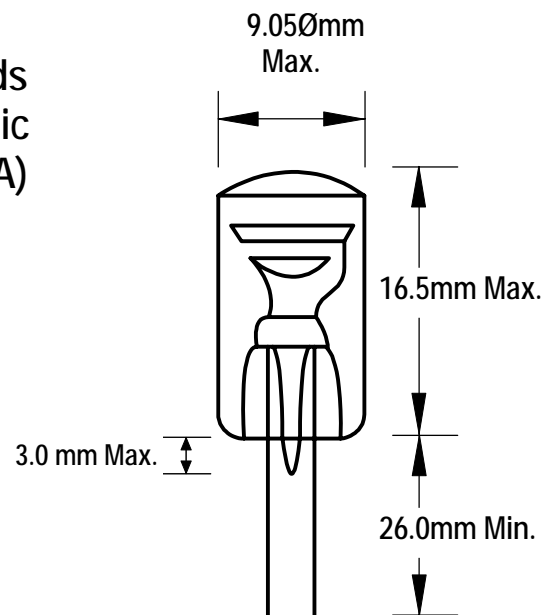
Strike-Voltage  $V_s = 95V$  Max. Operating-Current  $I_o = 0.80mA$

### 1. Features & Application

High Quality Len-end Ring-Electrode Neon lamp with 0.35 $\phi$ x26mm non-plated leads For use as indicators for "Ceran" glass ceramic Electric hob cooker tops for 110V Mains (USA) and 230V Mains (UK & European) Markets.

### 2. Physical Dimensions

Lamp diameter: 9.0mm -0.02/+0.05mm  
Lamp Length : 16.5mm Max.  
Lead Length : 0.35 $\phi$ +/-0.02 x 26.0mm Min.  
Seal-tip protrusion: 3.0mm Max.



### 3. Operating Conditions: -

115V 68K 0.80mA 10K Hrs.  
230V 180K 0.80mA 10K Hrs.  
Strike-Voltage  $V_s = 95V$  Max.

Solitronics Engineering Ltd. E-mail: [info@solitronics.com](mailto:info@solitronics.com)

Mains-Voltage AC	Volts	115V 50Hz	Strike-Voltage $V_s$	Volts	$V_s = 95V$ max. AC
Series Resistor	K ohm	68K	Wattage	W	1/3W
Current ( $I_o$ )	mA	0.80mA +/- 0.15mA	Life Expectancy	Hrs	20,000 Hrs
Mains-Voltage AC	Volts	230V 50Hz	Strike-Voltage $V_s$	Volts	$V_s = 95V$ max. AC
Series Resistor	K ohm	180K	Wattage	W	1/3W
Current ( $I_o$ )	mA	0.80mA +/- 0.15mA	Life Expectancy	Hrs	20,000 Hrs

**Note: All specifications are subject to change without notice.  
Final drawing will be issue with Pro-Forma Invoice at time of ordering.  
Nearest equivalent to ERG LG-100 (with better performance than ERG LG-100)  
Higher Brightness type for 230V equivalent to ERG LG-130 available upon request.**



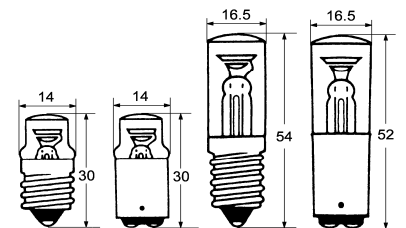
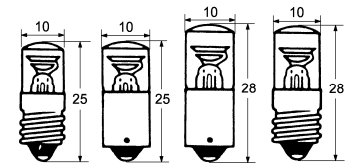
18<sup>th</sup> July 2005

Catalogue No. SEL-NE-BASED-GS-SF-01

**High Quality Glass-envelope Lens-end Cup-Ring Cup-Electrode  
 Neon and Green Fluorescent Based Signal Lamps**

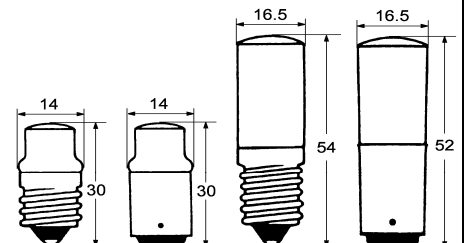
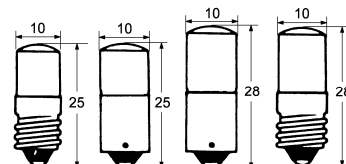
**1.0 Lens-end Glass-enveloped Ring-electrode Based Neon Lamps**

1.1	T-10x25mm	Part No. for E-10 Type	Part No. for BA9s Type
	110V 0.50mA 220V 1.20mA 380V 1.20mA	1025-GN-110 1025-GN-210 1025-GN-310	1025-GN-109 1025-GN-209 1025-GN-309
1.2	T-10x28mm	E-10	BA9s
	110V 0.50mA 220V 1.20mA 380V 1.20mA	1028-GN-110 1028-GN-210 1028-GN-310	1028-GN-109 1028-GN-209 1028-GN-309
1.3	T-13x33mm	E-12	BA15D
	110V 0.70mA 220V 1.50mA 380V 1.50mA	1333-GN-112 1333-GN-212 1333-GN-312	1333-GN-115D 1333-GN-215D 1333-GN-315D
1.4	T-14x30mm	E-14	BA15D
	110V 0.70mA 220V 1.50mA 380V 1.50mA	1430-GN-114 1430-GN-214 1430-GN-314	1430-GN-115D 1430-GN-215D 1430-GN-315D
1.5	T-16x52-54mm	E-14	BA15D
	110V 1.00mA 220V 1.80mA 380V 1.80mA	1654-GN-114 1654-GN-214 1654-GN-314	1654-GN-115D 1654-GN-215D 1654-GN-315D



**2.0 Glass-enveloped Green-fluorescent Based Neon Lamps**

2.1	T-10x25mm	E-10 per	BA9s
	110V 0.50mA 220V 1.20mA 380V 1.20mA	1025-GG-110 1025-GG-210 1025-GG-310	1025-GG-109 1025-GG-209 1025-GG-309
2.2	T-10x28mm	E-10	BA9s
	110V 0.50mA 220V 1.20mA 380V 1.20mA	1028-GG-110 1028-GG-210 1028-GG-310	1028-GG-109 1028-GG-209 1028-GG-309
2.3	T-14x30mm	E-14	BA15D
	110V 0.70mA 220V 1.50mA 380V 1.50mA	1430-GG-114 1430-GG-214 1430-GG-314	1430-GG-115D 1430-GG-215D 1430-GG-315D
2.4	T-16x52-54mm	E-14	BA15D
	110V 1.00mA 220V 1.80mA 380V 1.80mA	1654-GG-114 1654-GG-214 1654-GG-314	1654-GG-115D 1654-GG-215D 1654-GG-315D



Notes:

1. All lamps are supplied with internal ballast resistors.
2. Types without internal ballast resistors are also available on request.
3. Blue, orange, red and white fluorescent, colored types are also available on special request.



# SOLITRONICS ENGINEERING LTD.

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FAX: (852) 2730-3245

E-mail: [info@solitronics.com](mailto:info@solitronics.com)

## PLASTIC LENS-END NEON SIGNAL LAMPS

Date:

18<sup>th</sup> July 2005

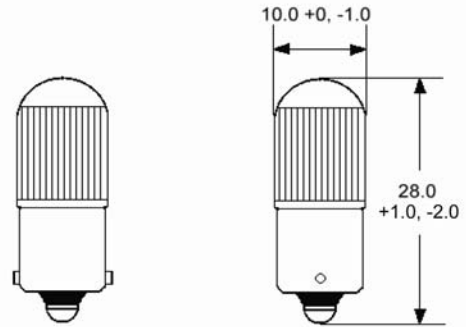
### T-10x28mm BA9s with Internal Resistor For 110/130V, 220/230V & 380/400V

Data Sheet:

**SEL-NPC-1028-X2-TM**

#### 1. PHYSICAL SIZE

Diameter: 10.0mm +0.0/-1.0mm  
Length: 28.0mm +1.0/-2.0mm



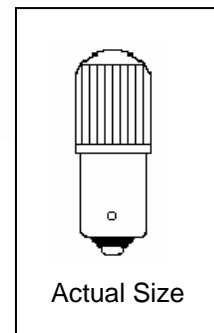
#### 2. BASE

Miniature Bayonet  
Din 49712 BA9S



#### 3. LAMP TYPE

Neon	For clear, amber, yellow and red lens
Green-Fluorescent	For clear and green translucent lens
Blue-Fluorescent	For clear and blue translucent lens



#### 4. ELECTRICAL RATING

SEL P/N	Equivalent Schneider P/N	Lamp Type	Voltage	Current ± 0.5mA	Design Life Expectancy
1028-12-N	DL1CS-7110AA	Neon	110/130V	2.0mA	10,000 hrs.
1028-12-G	DL1CS-3110AA	Green	110/130V	2.0mA	10,000 hrs.
1028-12-B	DL1CS-6110AA	Blue	110/130V	2.0mA	5,000 hrs.
1028-22-N	DL1CS-7220AA	Neon	220/230V	2.0mA	10,000 hrs.
1028-22-G	DL1CS-3220AA	Green	220/230V	2.0mA	10,000 hrs.
1028-22-B	DL1CS-6220AA	Blue	220/230V	2.0mA	5,000 hrs.
1028-32-N	DL1CS-7380AA	Neon	380/400V	1.5mA	10,000 hrs.
1028-32-G	DL1CS-3380AA	Green	380/400V	1.5mA	10,000 hrs.
1028-32-B	DL1CS-6380AA	Blue	380/400V	1.5mA	5,000 hrs.

#### 5. APPLICATIONS

For use in 22Ømm Lighted Push-button switches & Pilot-lights (Baco, Benedikt & Jager, Breter, Izumi, Lovato, Omron, Schneider-Telemecanique, etc.)

Available for use with Pilot Light with Red, Green, Amber or Blue colour Lens-cap.

#### 6. REMARKS:-

Also widely used as replacement lamps for indicators and lighted push-button switches of Japanese lifts (Fuji, Hitachi, Mitsubishi, etc.)

Note: Due to continuous development and improvements, all specifications are subject to change without prior notice.



# SOLITRONICS ENGINEERING LTD.

TEL: (852) 2730-8145

FAX: (852) 2730-3245

E-mail: info@solitronics.com

## PLASTIC LENS-END NEON SIGNAL LAMPS

Date: 22<sup>nd</sup> July 2005

**T-10x28mm E10 with or without Internal Resistor**  
For 110/130V, 220/230V & 380/400V AC 50/60Hz

Data Sheet:

**SEL-NPC-1028-X1**

### 1. PHYSICAL SIZE

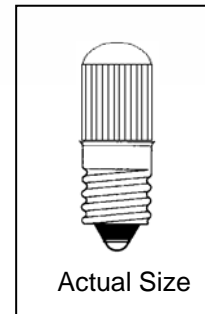
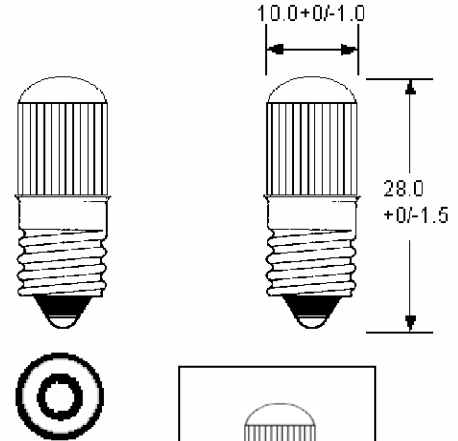
Diameter: 10.0mm + 0 / -1.0mm  
Length: 28.0mm + 0 / -1.5mm

### 2. BASE

Miniature Screw  
IEC E10/13

### 3. LAMP TYPE

Neon	For clear, amber, yellow and red lens
Green-Fluorescent	For clear and green translucent lens
Blue-Fluorescent	For clear and blue translucent lens



### 4. ELECTRICAL RATING

SEL P/N	Equivalent USA & Schneider P/N	Lamp Type	Voltage	Current ± 0.5mA	Design Life Expectancy
1028-11-N		Neon with resistor	110/130V	2.0mA	10,000 hrs.
1028-11-G		Green with resistor	110/130V	2.0mA	10,000 hrs.
1028-11-B		Blue with resistor	110/130V	2.0mA	5,000 hrs.
1028-21-N		Neon with resistor	220/230V	2.0mA	10,000 hrs.
1028-21-G		Green with resistor	220/230V	2.0mA	10,000 hrs.
1028-21-B		Blue with resistor	220/230V	2.0mA	5,000 hrs.
1028-31-N		Neon with resistor	380/400V	1.5mA	10,000 hrs.
1028-31-G		Green with resistor	380/400V	1.5mA	10,000 hrs.
1028-31-B		Blue with resistor	380/400V	1.5mA	5,000 hrs.
B1A	NE-51	Neon only	Vs=65V Max.	0.55mA#	25,000 hrs
B1A-R	NE-51-R	Neon with Resistor	110/125V	(220K)0.3mA	25,000 hrs
B2A	NE-51-H	Neon only	Vs=95V Max.	1.60mA##	25,000 hrs
B2A-R	NE51H-R	Neon with Resistor	110/125V	(47K) 1.3mA	25,000 hrs
B2G	NE51-G	Green fluorescent only	Vs=85V Max.	1.6mA##	15,000 hrs
B2G-R	NE51GR	Green with Resistor	110/125V	(47K) 1.3mA	15,000 hrs

# Use external 100K resistor on 110V and 330K resistor on 230V

## Use external 33K resistor on 110V and 100K resistor on 230V

### 5. APPLICATIONS

Miniature Screw Based Neon signal lamps for indicators and lighted push-button switches.

### 6. REMARKS: -

Also widely used as replacement lamps for indicators and lighted push-button switches.



# SOLITRONICS ENGINEERING LTD.

TEL: (852) 2730-8145

FAX: (852) 2730-3245

E-mail: info@solitronics.com

## T-10x25mm BA9S Neon Signal Lamps with Polycarbonate Fresnel-Ring Lens-cap

Date:

18<sup>th</sup> July 2005

## T-10x25mm BA9s with Internal Resistor For 110/130V, 220/240V & 380/400V

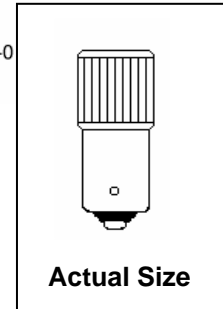
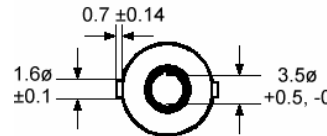
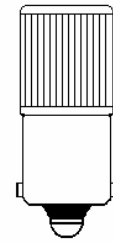
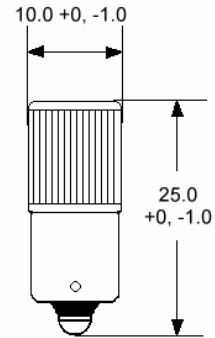
Data Sheet:

**SEL-NPC-1025-X2**

### 1. PHYSICAL SIZE

Diameter: 10.0mm + 0 / -1.0mm

Length: 25.0mm + 0 / -1.5mm



**Actual Size**

### 2. BASE

Miniature Bayonet  
Din 49712 BA9S

### 3. LAMP TYPE

Neon	For clear, amber, yellow and red lens
Green-Fluorescent	For clear and green translucent lens
Blue-Fluorescent	For clear and blue translucent lens

### 4. ELECTRICAL RATING

SEL P/N	Equivalent Schneider P/N	Lamp Type	Voltage	Current ± 0.5mA	Design Life Expectancy
1025-12-N	DL1CF110AA	Neon	110/130V	2.0mA	10,000 hrs.
1025-12-G		Green	110/130V	2.0mA	10,000 hrs.
1025-12-B		Blue	110/130V	2.0mA	5,000 hrs.
1025-22-N		Neon	220/240V	2.0mA	10,000 hrs.
1025-22-G		Green	220/240V	2.0mA	10,000 hrs.
1025-22-B		Blue	220/240V	2.0mA	5,000 hrs.
1025-32-N		Neon	380/400V	1.5mA	10,000 hrs.
1025-32-G		Green	380/400V	1.5mA	10,000 hrs.
1025-32-B		Blue	380/400V	1.5mA	5,000 hrs.

### 5. APPLICATIONS

For use in 22ømm Lighted Push-button switches & Pilot-lights (ABB, Allen-Bradley, Baco, Benedikt & Jager, Breter, EAO, Fuji-Electric, GE Power-Controls, IDEC-Izumi, Klockner-Moeller, Kraus & Naimer, Legrand, Lovato, Omron, Rafi, Schneider-Telemecanique, Simens, Sprecher+Schuh etc.etc.) Available for use with Pilot Lights with Red, Green, Amber or Blue Lens-cap.

### 6. REMARKS :-

Also widely used as replacement lamps for indicators and lighted push-button switches of Japanese lifts (Fuji, Hitachi, Mitsubishi, etc.)



# SOLITRONICS ENGINEERING LTD.

TEL: (852) 2730-8145

FAX: (852) 2730-3245

E-mail: info@solitronics.com

## T-10x25mm E-10 Neon Signal Lamps with Polycarbonate Fresnel-Ring Lens-cap

Date:

18<sup>th</sup> July 2005

## T-10x25mm with Internal Resistor E-10 For 110/130V, 220/240V & 380/400V

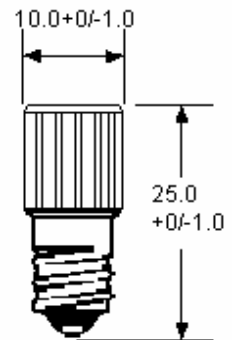
Data Sheet:

**SEL-NPC-1025-X1**

### 1. PHYSICAL SIZE

Diameter: 10.0mm + 0 / -1.0mm

Length: 25.0mm + 0 / -1.5mm



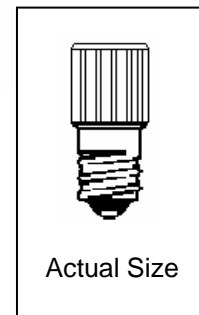
### 2. BASE

Miniature Screw  
IEC E-10/13



### 3. LAMP TYPE

Neon	For clear, amber, yellow and red lens
Green-Fluorescent	For clear and green translucent lens
Blue-Fluorescent	For clear and blue translucent lens



Actual Size

### 4. ELECTRICAL RATING

SEL P/N	Equivalent P/N	Lamp Type	Voltage	Current ± 0.5mA	Design Life Expectancy
1025-11-N		Neon	110/130V	2.0mA	10,000 hrs.
1025-11-G		Green	110/130V	2.0mA	10,000 hrs.
1025-11-B		Blue	110/130V	2.0mA	5,000 hrs.
1025-21-N		Neon	220/240V	2.0mA	10,000 hrs.
1025-21-G		Green	220/240V	2.0mA	10,000 hrs.
1025-21-B		Blue	220/240V	2.0mA	5,000 hrs.
1025-31-N		Neon	380/400V	1.5mA	10,000 hrs.
1025-31-G		Green	380/400V	1.5mA	10,000 hrs.
1025-31-B		Blue	380/400V	1.5mA	5,000 hrs.

### 5. APPLICATIONS

For use in 22ømm Lighted Push-button switches & Pilot-lights (ABB, Allen-Bradley, Baco, Benedikt & Jager, Breter, EAO, Fuji-Electric, GE Power-Controls, IDEC-Izumii, Klockner-Moeller, Kraus & Naimer, Legrand, Lovato, Omron, Rafi, Schneider-Telemecanique, Simens, Sprecher+Schuh, etc.)

Available for use with Pilot Lights with Red, Green, Amber or Blue Lens-cap.

### 6. REMARKS:-

Also widely used as replacement lamps for indicators and lighted push-button switches of Japanese lifts (Fuji, Hitachi, Mitsubishi, etc.)



# Solitronics T-1-1/4 Bi-Pin SB Neon lamp

## SEL P/N: NE410SB-4613BP-2330

### For 230V/330K/0.50mA 50K Hrs

Date (Ausgabe): 10-11-2006

## T-1-1/4 Bi-Pin with 4x10 SB Neon lamp (With 0.50Øx6mm Pins and with Lead-spacing = 2.54mm)

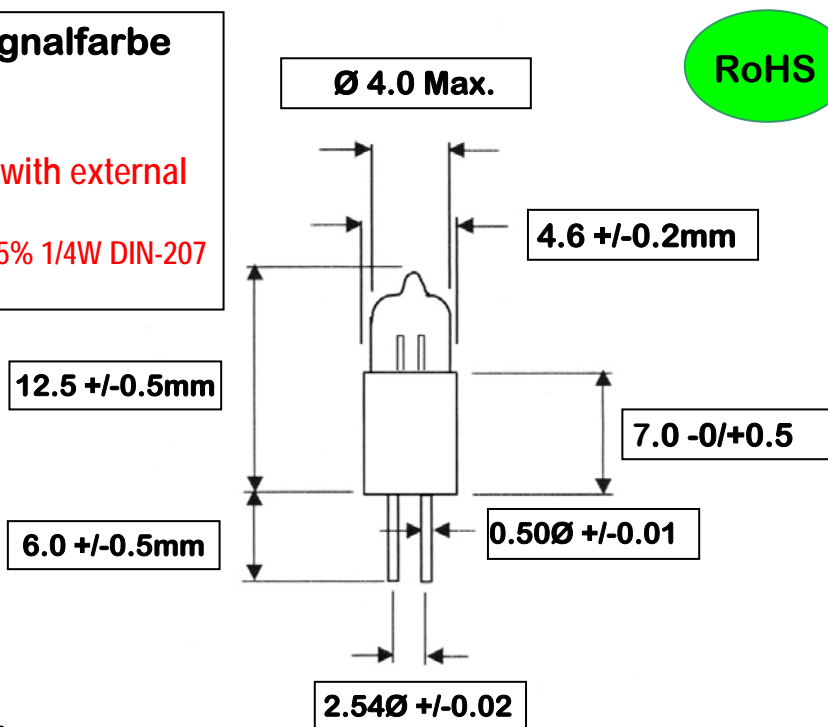
### Glimmlampen Signalfarbe

#### T-1-1/4 Bi-Pin

#### Important:

Lamp must be used with external series-resistor.

For 230V AC, use 330K 5% 1/4W DIN-207 series-resistor.



Note: All dimensions are in mm

### Standard-Brightness Baureihe normal

SOLITRONICS Part Number:	Supply Voltage/Series-Resistor/Current Nenn spannung/Vor-widerstand/Nennstrom	Strike- Voltage	Life-Hrs Lebensdauer (Mittel)
NE410SB-4613BP-2330	115V/150K/0.50mA    230V/330K/0.50mA	≤65V	50K Hrs+

#### Description:

4x10mm Standard Brightness Bi-Pin Neon Lamp with 0.5Øx6.0mm Pins Pin-Spacing: 2.54mm  
For 115V AC 50/60Hz and 230V 50/60Hz application with operating current of 0.35-0.55mA

#### Remarks:

Typical performance: 230V/330K/0.50mA 50K Hrs.+

#### Index

Solitronics Engineering Ltd 1515, Star House, Kowloon Hong Kong

Drawing No. SEL-NE410SB-4613BP-2330

E-mail: info@solitronics.com



# Solitronics T-1-1/4 Bi-Pin HB Neon lamp

## SEL P/N: NE410HB-4613BP-2100

### For 230V/100K/1.70mA 15K Hrs

Date (Ausgabe): 10-11-2006

## T-1-1/4 Bi-Pin with 4x10 HB Neon lamp (With 0.50Øx6mm Pins and with Lead-spacing = 2.54mm)

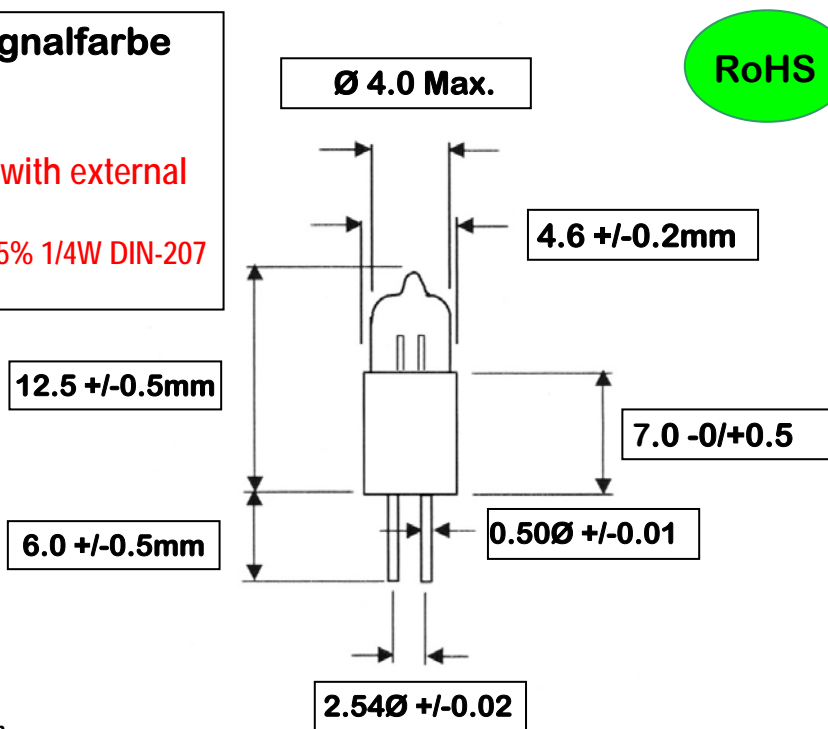
### Glimmlampen Signalfarbe

#### T-1-1/4 Bi-Pin

#### Important:

Lamp must be used with external series-resistor.

For 230V AC, use 100K 5% 1/4W DIN-207 series-resistor.



Note: All dimensions are in mm

### High-Brightness Baureihe superhell

SOLITRONICS Part Number:	Supply Voltage/Series-Resistor/Current Nenn spannung/Vor-widerstand/Nennstrom	Strike- Voltage	Life-Hrs Lebensdauer (Mittel)
NE410HB-4613BP-2100	115V/33K/1.70mA    230V/100K/1.70mA	≤95V	15K Hrs+

#### Description:

4x10mm High Brightness Bi-Pin Neon Lamp with 0.5Øx6.0mm Pins Pin-Spacing: 2.54mm  
For 115V AC 50/60Hz and 230V 50/60Hz application with operating current of 1.60-1.80mA

#### Remarks:

Typical performance: 230V/100K/1.70mA 15K Hrs.

#### Index

**Solitronics Engineering Ltd 1515, Star House, Kowloon Hong Kong**

**Drawing No. SEL-NE410HB-4613BP-2100**

E-mail: info@solitronics.com



# Solitronics T-1-1/4 Bi-Pin Green

## SEL P/N: NE410G2X-4613BP-2150

For 230V/150K/1.20mA 15K Hrs

Date (Ausgabe): 10-11-2006

### T-1-1/4 Bi-Pin with 4x10 Green fluorescent Lamp (With 0.5Øx6mm Pins and with Lead-spacing: 2.54mm)

#### Glimmlampen Signalfarbe T-1-1/4 Bi-Pin

#### Important:

Lamp must be used with external  
series-resistor.  
For 230V AC use 120K 5% 1/4W DIN-207  
series-resistor

12.5 +/-0.5mm

6.0 +/-0.5mm

Ø 4.0 Max.

4.6 +/-0.2mm

7.0 -0/+0.5

0.50Ø +/-0.01

2.54Ø +/-0.02

RoHS

Note: All dimensions are in mm

#### Green-fluorescent Signalfarbe Grün

SOLITRONICS Part Number:	Supply Voltage/Series-Resistor/Current Nenn spannung/Vor-widerstand/Nennstrom		Strike- Voltage	Life-Hrs Lebensdauer (Mittel)
NE410G2X-4613BP-2150	115V/47K/1.20mA (Typical)	230V/120K/1.20mA (Typical)	≤85V	15K Hrs+

#### Description:

4x10mm Green Fluorescent Lamp with 0.5Øx6.0mm Pins Pin-Spacing: 2.54mm  
For 115V AC 50/60Hz and 230V 50/60Hz application with operating current of 1.05-1.25mA

#### Remarks:

Typical performance: 230V/150K/1.20mA 15K Hrs.

Index

Solitronics Engineering Ltd 1515, Star House, Kowloon Hong Kong

Drawing No. SEL-NE410G2X-4613BP-2150

E-mail: info@solitronics.com