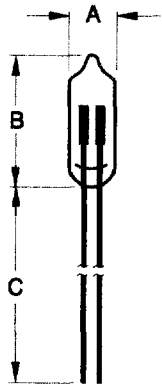
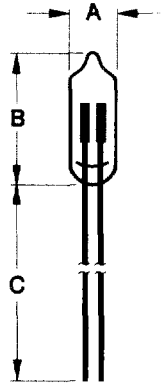




Neon Indicator Lamps

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Neon
Products

Configuration	Part Number	Old Ref. Number	Design Current mA	Maximum Breakdown Voltage	
				VAC	VDC
Wire Terminal — Standard Brightness					
	2ML	NE-38S	0.3	65	90
	A1A	NE-2	0.6	65	90
	A1A-T	NE-2T	0.6	65	90
	A1B		0.3	65	90
	A1D		0.3	65	90
	A1D-T		0.3	65	90
	K4A	AR-9	0.3	80	115
	A2B	NE-2V	0.7	65	90
	A2B-T	NE-2VT	0.7	65	90
	A9A	NE-2E	0.7	65	90
	A9A-T	NE-2ET	0.7	65	90
	A9A-C	NE-2E1	0.7	65	90
	A9A-CT	NE-2E1T	0.7	65	90
Wire Terminal — High Brightness					
	1MH	NE-38	1.2	95	135
	A1C		1.2	95	135
	A1C-T		1.2	95	135
	G2B-1		1.2	95	135
	G2B-2		1.4	95	135
	A3C	NE-2U	1.9	95	135
	A3C-T	NE-2UT	1.9	95	135
	C2A	NE-2H	1.9	95	135
	C2A-T	NE-2HT	1.9	95	135
	C2A-C	NE-2H1	1.9	95	135
	D2A		2.6	95	135

Footnotes

- Life value is to approximately 50% of initial light output. Values shown apply to use on AC unless otherwise shown. Life on DC is approximately 60% of AC values when DC current is equal to RMS AC value. When equal DC and RMS AC voltages and equal resistances are utilized, life will be approximately the same.
- For DC operation of high brightness lamps use a minimum of 150 circuit volts. Maximum initial breakdown voltage 95 VAC, 135 VDC in light.
- Tinned leads.
- High brightness.
- Formed tip.
- Dark effect reduced.
- Lamp drops through a .310" diameter cylinder of .500" minimum length.



Neon Indicator Lamps

Series Resistor				Average Useful Life	Dimensions Inches			Footnotes
100-125V		220-250V			A (Max.)	B (Max.)	C (Min.)	
Ohms	W	Ohms	W					
Wire Terminal — Standard Brightness								
100K	1/4	220K	1/3	12,000	.156 (4.0)	.395 (10.0)	1.00 (25.4)	1, 5
100K	1/4	540K	1/3	25,000	.244 (6.2)	1.000 (25.4)	1.00 (25.4)	1, 5
100K	1/4	540K	1/3	25,000	.244 (6.2)	1.000 (25.4)	1.00 (25.4)	1, 3, 5
220K	1/4	540K	1/3	25,000	.244 (6.2)	.500 (12.7)	1.00 (25.4)	1, 5
220K	1/4	540K	1/3	25,000	.244 (6.2)	.500 (12.7)	1.00 (25.4)	1, 5, 6
220K	1/4	540K	1/3	25,000	.244 (6.2)	.500 (12.7)	1.00 (25.4)	1, 3, 5, 6
220K	1/4	540K	1/3	50	.244 (6.2)	.980 (24.9)	1.00 (25.4)	14
100K	1/4	220K	1/3	25,000	.244 (6.2)	.750 (19.0)	2.00 (50.8)	1, 5, 6
100K	1/4	220K	1/3	25,000	.244 (6.2)	.750 (19.0)	2.00 (50.8)	1, 3, 5, 6
100K	1/4	220K	1/3	25,000	.244 (6.2)	.750 (19.0)	2.00 (50.8)	1, 5
100K	1/4	220K	1/3	25,000	.244 (6.2)	.750 (19.0)	2.00 (50.8)	1, 3, 5
100K	1/4	220K	1/3	25,000	.244 (6.2)	.750 (19.0)	1.00 (25.4)	1, 5
100K	1/4	220K	1/3	25,000	.244 (6.2)	.750 (19.0)	1.00 (25.4)	1, 3, 5
Wire Terminal — High Brightness								
47K	1/4	150K	1/3	12,000	.156 (10.0)	.395 (10.0)	1.00 (25.4)	1, 4, 5
47K	1/4	150K	1/3	25,000	.244 (6.2)	.500 (12.7)	1.00 (25.4)	2, 4, 5, 6, 8
47K	1/4	150K	1/3	25,000	.244 (6.2)	.500 (12.7)	1.00 (25.4)	2, 3, 4, 5, 6, 8
47K	1/4	150K	1/3	15,000	.244 (6.2)	.500 (12.7)	1.00 (25.4)	1, 4, 5, 13
39K	1/4	120K	1/3	15,000	.244 (6.2)	.750 (19.0)	1.00 (25.4)	1, 4, 5, 13
30K	1/4	100K	1/3	25,000	.244 (6.2)	.750 (19.0)	2.00 (50.8)	2, 4, 5, 6, 8, 9
30K	1/4	100K	1/3	25,000	.244 (6.2)	.750 (19.0)	2.00 (50.8)	2, 3, 4, 5, 6, 8, 9
30K	1/4	100K	1/3	25,000	.244 (6.2)	.750 (19.0)	2.00 (50.8)	2, 4, 5, 6, 8
30K	1/4	100K	1/3	25,000	.244 (6.2)	.750 (19.0)	2.00 (50.8)	2, 3, 4, 5, 6, 8
30K	1/4	100K	1/3	25,000	.244 (6.2)	.750 (19.0)	1.00 (25.4)	2, 4, 5, 6, 8
22K	1/4	68K	1/3	25,000	.244 (6.2)	.980 (24.9)	1.00 (25.4)	2, 4, 5, 6, 8, 10

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Neon
Products

8. Life values shown apply to use on AC unless otherwise shown. End of life occurs when breakdown voltage increases to line voltage and lamp will no longer start. With equal DC and RMS AC current, life will be somewhat lower than the 60% value quoted for standard brightness lamp.

9. Maximum breakdown voltage in total darkness 100VAC.

10. Minimum current for stable operation 1.5mA.

11. Resistor included in Base.

12. Caution: Bulb may shatter and/or circuit may be damaged without external series resistance.

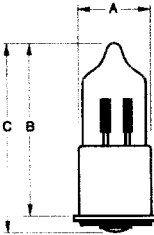
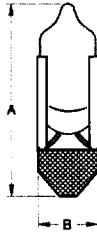
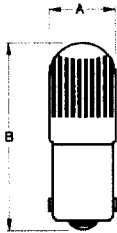
13. Green fluorescent.

14. Argon gas fill.



Neon Indicator Lamps

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Neon
Products

Configuration	Part Number	Old Ref. Number	Design Current mA	Maximum Breakdown Voltage	
				VAC	VDC
T-1³/₄ Midget Flange Base					
	A1G		0.3	65	90
	A1G-R		0.3	65	90
	A1H		1.2	95	135
	A1H-R		1.2	95	135
	C7A	NE-2D	0.7	65	90
	C7A-R		0.7	65	90
	C9A	NE-2J	1.9	95	135
	C9A-R		1.9	95	135
	G9B		1.2	95	135
	G9B-R		1.2	95	135
T-2 Telephone Slide Base					
	K1C5		0.7	65	90
	K1C5-R		0.7	65	90
	K1B1		1.2	95	135
	K1B1-R		1.2	95	135
	K1A5	NE-84	1.9	95	135
	K1A5-R		1.9	95	135
T-3¹/₄ Miniature Bayonet Base					
	B1A	NE-51	0.3	65	90
	B1A-R	NE-51R	0.3	65	90
	B2A	NE-51H	1.2	95	135
	B2A-R	NE-51HR	1.2	95	135
	B2G	NE-51G	1.2	95	135
	B2G-R	NE-51GR	1.2	95	135

Footnotes

- Life value is to approximately 50% of initial light output. Values shown apply to use on AC unless otherwise shown. Life on DC is approximately 60% of AC values when DC current is equal to RMS AC value. When equal DC and RMS AC voltages and equal resistances are utilized, life will be approximately the same.
- For DC operation of high brightness lamps use a minimum of 150 circuit volts. Maximum initial breakdown voltage 95 VAC, 135 VDC in light.
- Tinned leads.
- High brightness.
- Formed tip.
- Dark effect reduced.
- Lamp drops through a .310" diameter cylinder of .500" minimum length.



Neon Indicator Lamps

Series Resistor				Average Useful Life	Dimensions Inches			Footnotes
100-125V		220-250V			A (Max.)	B (Max.)	C (Max.)	
Ohms	W	Ohms	W					
T-1³/₄ Midget Flange Base								
220K	1/4	540K	1/3	25,000	.250 (6.35)	.525 (13.3)	.625 (15.9)	1, 5, 12
220K	1/4	—	—	25,000	.250 (6.35)	.525 (13.3)	.625 (15.9)	1, 5, 11
47K	1/4	150K	1/3	25,000	.250 (6.35)	.525 (13.3)	.625 (15.9)	2, 4, 5, 6, 8, 12
47K	1/4	—	—	25,000	.250 (6.35)	.525 (13.3)	.625 (15.9)	2, 4, 5, 6, 8, 11
100K	1/4	220K	1/3	25,000	.250 (6.35)	.828 (21.0)	.938 (23.8)	1, 5, 12
100K	1/4	—	—	25,000	.250 (6.35)	.828 (21.0)	.938 (23.8)	1, 5, 11
30K	1/4	100K	1/3	25,000	.250 (6.35)	.828 (21.0)	.938 (23.8)	2, 4, 5, 6, 8, 12
30K	1/4	—	—	25,000	.250 (6.35)	.828 (21.0)	.938 (23.8)	2, 4, 5, 6, 8, 11
47K	1/4	150K	1/3	15,000	.250 (6.35)	.828 (21.0)	.938 (23.8)	1, 5, 12, 13
47K	1/4	—	—	15,000	.250 (6.35)	.828 (21.0)	.938 (23.8)	1, 5, 11, 13
T-2 Telephone Slide Base								
100K	1/4	220K	1/3	25,000	1.03 (26.2)	.290 (7.4)	—	1, 5, 7, 12
100K	1/4	—	—	25,000	1.03 (26.2)	.290 (7.4)	—	1, 5, 7, 11
47K	1/4	150K	1/3	25,000	1.03 (26.2)	.290 (7.4)	—	2, 4, 6, 7, 8, 12
47K	1/4	—	—	25,000	1.03 (26.2)	.290 (7.4)	—	2, 4, 6, 7, 8, 11
30K	1/4	100K	1/3	25,000	1.03 (26.2)	.290 (7.4)	—	2, 4, 5, 6, 7, 8, 12
30K	1/4	—	—	25,000	1.03 (26.2)	.290 (7.4)	—	2, 4, 5, 6, 7, 8, 11
T-3¹/₄ Miniature Bayonet Base								
220K	1/4	540K	1/3	25,000	.430 (10.9)	1.188 (30.2)	—	1
220K	1/4	—	—	25,000	.430 (10.9)	1.188 (30.2)	—	1, 11
47K	1/4	150K	1/3	25,000	.430 (10.9)	1.188 (30.2)	—	2, 4, 6, 8
47K	1/4	—	—	25,000	.430 (10.9)	1.188 (30.2)	—	2, 4, 6, 9, 11
47K	1/4	150K	1/3	15,000	.430 (10.9)	1.188 (30.2)	—	2, 4, 5, 13
47K	1/4	—	—	15,000	.430 (10.9)	1.188 (30.2)	—	2, 4, 5, 11, 13

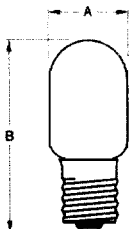
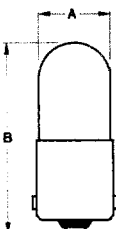
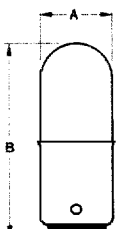
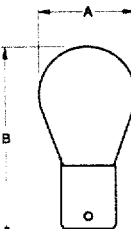
3
Neon
Products

- 8. Life values shown apply to use on AC unless otherwise shown. End of life occurs when breakdown voltage increases to line voltage and lamp will no longer start. With equal DC and RMS AC current, life will be somewhat lower than the 60% value quoted for standard brightness lamp.
- 9. Maximum breakdown voltage in total darkness 100VAC.
- 10. Minimum current for stable operation 1.5mA.
- 11. Resistor included in Base.
- 12. Caution: Bulb may shatter and/or circuit may be damaged without external series resistance.
- 13. Green fluorescent.
- 14. Argon gas fill.



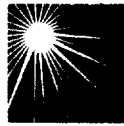
Neon Indicator Lamps

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Neon
Products

Configuration	Part Number	Old Ref. Number	Design Current mA	Maximum Breakdown Voltage	
				VAC	VDC
T-4¹/₂ Candelabra Screw Base					
	B7A	NE-45	2.0	65	90
	F3A	NE-57	2.0	65	90
	F4A	NE-58	2.0	65	90
	J2A	AR-3	3.5	80	115
T-4¹/₂ S.C. Bayonet Base					
	B6A	NE-21	2.0	65	90
	B8A	NE-47	2.0	65	90
T-4¹/₂ D.C. Bayonet Base					
	B5A	NE-17	2.0	65	90
	B9A	NE-48	2.0	65	90
S-7 D.C. Bayonet Base					
	R1A	NE-79	8.0	65	90

Footnotes

- Life value is to approximately 50% of initial light output. Values shown apply to use on AC unless otherwise shown. Life on DC is approximately 60% of AC values when DC current is equal to RMS AC value. When equal DC and RMS AC voltages and equal resistances are utilized, life will be approximately the same.
- For DC operation of high brightness lamps use a minimum of 150 circuit volts. Maximum initial breakdown voltage 95 VAC, 135 VDC in light.
- Tinned leads.
- High brightness.
- Formed tip.
- Dark effect reduced.
- Lamp drops through a .310" diameter cylinder of .500" minimum length.



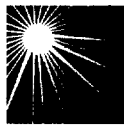
Neon Indicator Lamps

Series Resistor				Average Useful Life	Dimensions Inches			Footnotes
100-125V		220-250V			A (Max.)	B (Max.)	C (Max.)	
Ohms	W	Ohms	W					
T-4¹/₂ Candelabra Screw Base								
30K	1/4	—	—	5,000	.588 (14.9)	1.53 (38.9)	—	1, 11
30K	1/4	—	—	7,500	.588 (14.9)	1.53 (38.9)	—	1, 11
—	—	100K	1/3	5,000	.588 (14.9)	1.53 (38.9)	—	1, 11
15K	1/4	—	—	150	.588 (14.9)	1.53 (38.9)	—	1, 11, 14
T-4¹/₂ S.C. Bayonet Base								
30K	1/4	100K	1/3	7,500	.588 (14.9)	1.50 (38.1)	—	1, 12
30K	1/4	100K	1/3	5,000	.588 (14.9)	1.50 (38.1)	—	1, 12
T-4¹/₂ D.C. Bayonet Base								
30K	1/4	100K	1/3	7,500	.588 (14.9)	1.50 (38.1)	—	1, 12
30K	1/4	100K	1/3	5,000	.588 (14.9)	1.50 (38.1)	—	1, 12
S-7 D.C. Bayonet Base								
7.5K	1/4	25K	1/3	10,000	.876 (22.2)	2.00 (50.8)	—	1, 12

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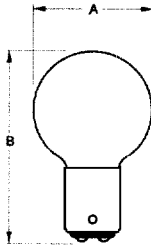
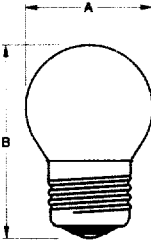
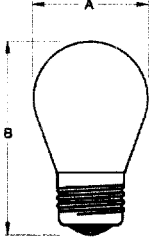
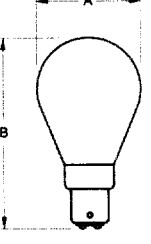
Neon
Products

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| <p>8. Life values shown apply to use on AC unless otherwise shown. End of life occurs when breakdown voltage increases to line voltage and lamp will no longer start. With equal DC and RMS AC current, life will be somewhat lower than the 60% value quoted for standard brightness lamp.</p> | <p>9. Maximum breakdown voltage in total darkness 100VAC.</p> <p>10. Minimum current for stable operation 1.5mA.</p> <p>11. Resistor included in Base.</p> | <p>12. Caution: Bulb may shatter and/or circuit may be damaged without external series resistance.</p> <p>13. Green fluorescent.</p> <p>14. Argon gas fill.</p> |
|---|--|---|



Neon Indicator Lamps

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Neon
Products

Configuration	Part Number	Old Ref. Number	Design Current mA	Maximum Breakdown Voltage	
				VAC	VDC
G-10 D.C. Bayonet Base					
	L5A	NE-32	8.0	65	90
S-11 Medium Screw Base					
	J9A	NE-56	5.0	60	85
	J5A	NE-30	8.0	60	85
S-14 Medium Screw Base					
	R2A	NE-34	18.0	65	90
	W1A	AR-1	18.0	80	115
	R6A	NE-40	30.0	65	90
S-14 D.C. Bayonet Skirted Base					
	R9A	NE-42	30.0	65	90

Footnotes

- Life value is to approximately 50% of initial light output. Values shown apply to use on AC unless otherwise shown. Life on DC is approximately 60% of AC values when DC current is equal to RMS AC value. When equal DC and RMS AC voltages and equal resistances are utilized, life will be approximately the same.
- For DC operation of high brightness lamps use a minimum of 150 circuit volts. Maximum initial breakdown voltage 95 VAC, 135 VDC in light.
- Tinned leads.
- High brightness.
- Formed tip.
- Dark effect reduced.
- Lamp drops through a .310" diameter cylinder of .500" minimum length.



Neon Indicator Lamps

Series Resistor				Average Useful Life	Dimensions Inches			Footnotes
100-125V		220-250V			A (Max.)	B (Max.)	C (Max.)	
Ohms	W	Ohms	W					
G-10 D.C. Bayonet Base								
7.5K	1/4	25K	1/3	10,000	1.29 (32.8)	2.13 (54.1)	—	1, 12
S-11 Medium Screw Base								
—	—	39K	1/3	5,000	1.42 (36.1)	2.25 (57.2)	—	1, 11
7.5K	1/4	—	—	10,000	1.42 (36.1)	2.25 (57.2)	—	1, 11
S-14 Medium Screw Base								
3.5K	1/4	—	—	10,000	1.80 (45.7)	3.50 (88.9)	—	1,11
3.5K	1/4	—	—	1,000	1.80 (45.7)	3.50 (88.9)	—	1,11, 14
2.2K	1/4	—	—	10,000	1.80 (45.7)	3.50 (88.9)	—	1,11
S-14 D.C. Bayonet Skirted Base								
2.2K	1/4	7.5K	1/3	10,000	1.80 (45.7)	3.98 (101.1)	—	1, 12

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Neon
Products

8. Life values shown apply to use on AC unless otherwise shown. End of life occurs when breakdown voltage increases to line voltage and lamp will no longer start. With equal DC and RMS AC current, life will be somewhat lower than the 60% value quoted for standard brightness lamp.

9. Maximum breakdown voltage in total darkness 100VAC.

10. Minimum current for stable operation 1.5mA.

11. Resistor included in Base.

12. Caution: Bulb may shatter and/or circuit may be damaged without external series resistance.

13. Green fluorescent.

14. Argon gas fill.