

Hi-Tech LAMPS, INC.

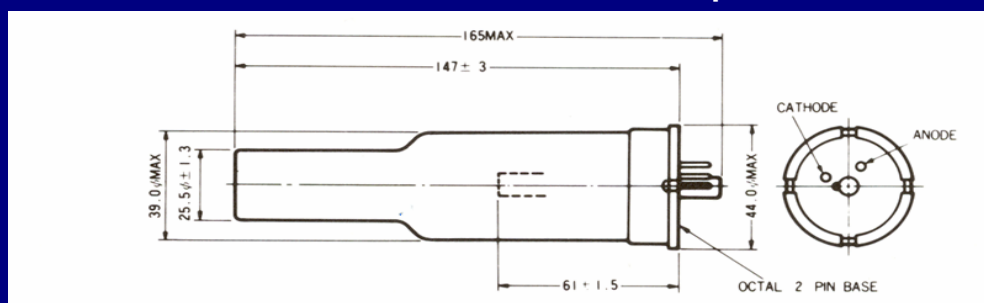
Hollow Cathode Lamp Specialist

Toll Free - 800-229-6509

www.hi-techlamps.com

Hamamatsu 38mm Hollow Cathode Lamps

L233 Series Single Element Lamps
L2433 Series Single Element Lamps with S-H Correction
L733 Series Multi-Element Lamps



Part Number	Elements	Max absorption nm	Analytical Line nm	Output nA	Output nA	Rec. Current mA	Max. Current mA
L733-321NU	Al, Ca, Mg						
L233-13NB(Al)	Aluminum	309.27	396.15	1360	1070	10	20
L2433-13NB(Al)	Aluminum	309.27	396.15				
L233-51NQ(Sb)	Antimony	217.58	231.15	80	80	10	15
L2433-51NQ(Sb)	Antimony	217.58	231.15				
L233-33NQ(As)	Arsenic	193.7	197.2	15	17	10	12
L2433-33NQ(As)	Arsenic	193.7	197.2				
L233-56NB(Ba)	Barium	553.55		420		10	20
L2433-56NB(Ba)	Barium	553.55					
L233-4NQ(Be)	Beryllium	234.86		3710		10	20
L2433-04NQ	Beryllium	234.86					
L233-83NQ(Bi)	Bismuth	223.06	306.77	100	1200	10	12
L2433-83NQ(Bi)	Bismuth	223.06	306.77				
L233-5NQ(B)	Boron	249.68	249.77	120		10	20
L2433-05NQ	Boron	249.68	249.77				
L733-202NU	Ca, Mg	422.67	285.21	1280	1880	10	18
L733-322NQ	Ca, Mg, Zn						
L233-48NQ(Cd)	Cadmium	228.8		150		5	12
L2433-48NQ(Cd)	Cadmium	228.8					
L233-20NU(Ca)	Calcium	422.67		1280		10	18
L2433-20NU(Ca)	Calcium	422.67					
L733-402NQ	Cd, Cu, Pb, Zn						
L233-55NB(Cs)	Cesium	852.11		10		10	20
L233-24NB(Cr)	Chromium	357.87	425.44	1650	1220	10	20
L2433-24NB(Cr)	Chromium	357.87	425.44				
L733-601NQ	Co, Cr, Cu, Fe, Mn, Ni						
L733-401NQ	Co, Cu, Mo, Zn						
L233-27NU(Co)	Cobalt	240.73	346.58	460	1770	10	20

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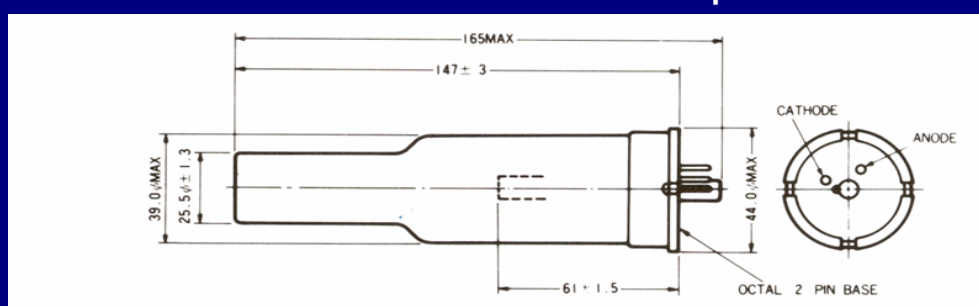
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L2433-27NU(Co)	Cobalt	240.73	346.58				
L233-29NB(Cu)	Copper	324.75	327.4	6800	4730	10	20
L2433-29NB(Cu)	Copper	324.75	327.4				
L233-1DQ(D2)	Deuterium		240	220		30	35
L233-66NB(Dy)	Dysprosium	404.59	421.17	500	500	15	15
L2433-66NB	Dysprosium	404.59	421.17				
L2433-68NB	Dysprosium	404.59	421.17				
L233-68NB(Er)	Erbium	400.79	415.11	1500	1200	15	15
L233-63NB(Eu)	Europium	459.4	462.72	85	60	15	15
L2433-63NB	Europium	459.4	462.72				
L733-204NQ	Fe, Ni	248.33	232	200	270	10	20
L233-64NB(Gd)	Gadolinium	422.58	407.87	270	190	12	12
L233-31NU(Ga)	Gallium	294.36	287.42	490	250	4	6
L2433-31NU	Gallium	287.42	294.36				
L233-32NU(Ge)	Germanium	265.16		165		10	20
L2433-32NU	Germanium	265.14					
L233-79NQ(Au)	Gold	242.8	267.59	1380	1080	10	16
L2433-79NQ(Au)	Gold	242.8	267.59				
L233-72NU(Hf)	Hafnium	286.64	307.29	200	180	20	25
L2433-72NU	Hafnium	286.64	307.29				
L233-67NB(Ho)	Holmium	410.38	416.3	1330	800	15	20
L2433-67NB	Holmium	410.38	416.3				
L233-49NB(In)	Indium	303.94	325.61	550	960	10	15
L233-77NQ(Ir)	Iridium	208.88	266.47	410	8000	20	20
L233-26NU(Fe)	Iron	248.33	371.99	330	1930	10	20
L2433-26NQ(Fe)	Iron	248.33	371.99				
L233-57NB(La)	Lanthanum	550.13	357.44	25	35	10	20
L2433-57NB(La)	Lanthanum	357.44	550.13				
L233-82NQ(Pb)	Lead	217	283.3	170	3740	10	15
L2433-82NQ(Pb)	Lead	217	283.3				
L233-3NB(Li)	Lithium	670.78	610.36	410	45	10	20
L2433-03NB(Li)	Lithium	610.36	670.78				

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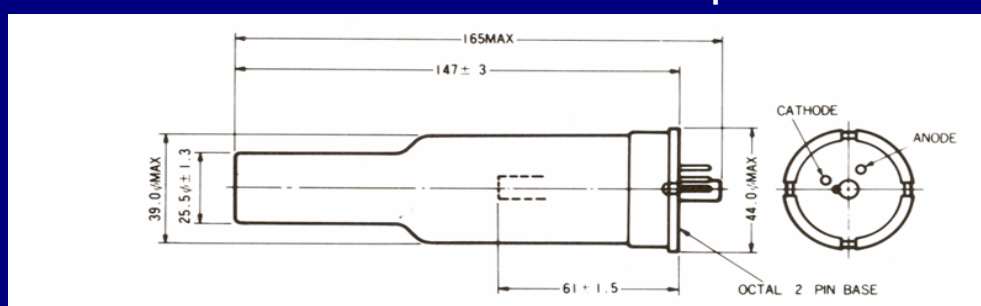
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L233-71NB(Lu)	Lutetium	331.21	328.17	900	600	15	15
L233-12NU(Mg)	Magnesium	285.21		1880		10	18
L2433-12NU(Mg)	Magnesium	285.21					
L233-25NU(Mn)	Manganese	279.48	403.08	1400	4300	10	20
L2433-25NU(Mn)	Manganese	279.48	403.08				
L233-80NU(Hg)	Mercury	253.65		670		4	6
L233-42NB(Mo)	Molybdenum	313.26	320.88	325	70	10	20
L2433-42NB(Mo)	Molybdenum	313.26	320.88				
L733-201NB	Na, K	589	766.49	600	12	10	15
L233-60NB(Nd)	Neodymium	492.45	463.42	40	25	15	15
L233-28NQ(Ni)	Nickel	232	341.48	360	970	10	20
L2433-28NQ(Ni)	Nickel	232	341.48				
L233-41NB(Nb)	Niobium	334.91	405.89	260	600	20	30
L233-76NU(Os)	Osmium	290.9	305.86	30	10	15	15
L233-46NQ(Pd)	Palladium	244.79	247.64	610	490	10	20
L2433-46NQ	Palladium	244.79	247.64				
L233-78NU(Pt)	Platinum	265.95	299.8	790	990	10	20
L2433-78NU	Platinum	265.95	299.8				
L233-19NB(K)	Potassium	766.49	769.9	12	9	10	15
L2433-19NB(K)	Potassium	766.49	769.9				
L233-59NB(Pr)	Praseodymium	495.13	513.34	140	120	15	15
L233-75NB(Re)	Rhenium	346.05	346.47	1630	1250	20	25
L233-45NB(Rh)	Rhodium	343.49		1880		10	20
L233-37NB(Rb)	Rubidium	780.02	794.76	95	20	10	20
L233-44NB(Ru)	Ruthenium	349.89		1200		20	25
L2433-44NB	Ruthenium	349.89					
L233-62NB(Sm)	Samarium	429.67	484.17	150	150	15	20
L2433-62NB	Samarium	429.67	484.17				
L233-21NB(Sc)	Scandium	390.74	391.18	380	410	10	15
L233-34NQ(Se)	Selenium	196.03		55		20	25
L2433-34NQ(Se)	Selenium	196.03					
L733-203NU	Si, Al	251.61	309.27	95	190	10	20

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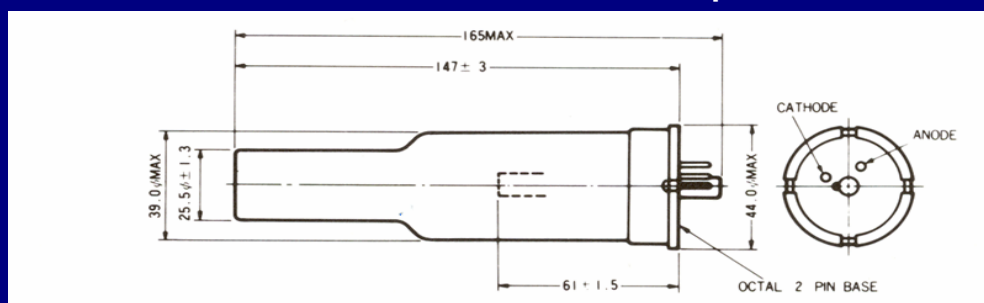
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L233-14NU(Si)	Silicon	251.61	288.16	95	95	10	20
L2433-14NU(Si)	Silicon	251.61	288.16				
L233-47NB(Ag)	Silver	328.07	338.28	2500	1500	10	20
L2433-47NB(Ag)	Silver	328.07	338.28				
L233-11NB(Na)	Sodium	589	589.59	600	470	10	15
L2433-11NB(Na)	Sodium	589	589.59				
L733-205NB	Sr, Ba	460.73	553.55	400	350	10	20
L233-38NB(Sr)	Strontium	460.73		500		10	20
L2433-38NB(Sr)	Strontium	460.73					
L233-73NU(Ta)	Tantalum	271.47	275.83	80	40	10	20
L233-52NQ(Te)	Tellurium	214.27		60		10	16
L2433-52NQ	Tellurium	214.27					
L233-65NB(Tb)	Terbium	432.64	431.88	60	50	15	15
L233-81NU(Tl)	Thallium	276.78	377.57	600	700	7	10
L233-69NB(Tm)	Thulium	371.79	410.58	80	60	10	15
L233-50NQ(Sn)	Tin	224.61	286.33	35	120	20	20
L2433-50NQ(Sn)	Tin	224.61	286.33				
L233-22NB(Ti)	Titanium	364.27	365.35	200	190	10	20
L2433-22NB(Ti)	Titanium	364.27	365.35				
L233-74NU(W)	Tungsten	255.14	400.87	40	320	10	25
L233-23NB(V)	Vanadium	318.4	306.64	810	110	10	20
L2433-23NB(V)	Vanadium	306.64	318.4				
L233-70NB(Yb)	Ytterbium	398.79	346.43	410	150	10	10
L2433-70NB	Ytterbium	346.33	398.79				
L233-39NB(Y)	Yttrium	410.23	412.83	200	190	15	15
L233-30NQ(Zn)	Zinc	213.86	307.59	450	1290	7	15
L2433-30NQ(Zn)	Zinc	213.86	307.59				
L233-40NB(Zr)	Zirconium	360.12	468.78	700	930	10	20