

Numeric and Symbolic LEDs

T-41-33

SHARP ELEK/ MELEC DIV

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■ Numeric and Symbolic LEDs Line-up

No. of digits	Radiation color	Radiation shape	P Red	T Red (HL)*2	R Red	D Red	S Sunset orange	H Yellow	E Yellow-green (HL)*2	N Yellow-green	K Green (HL)*2	G Green	Outline dimensions (Fig.)	
														Common pin (A*)
1	1.8	8	A			GL9D18			GL9E18				1	
			K			GL8D18			GL8E18					
	1.0	8	A	GL9P10	GL9T10	GL9R10	GL9D10	GL9S10			GL9N10			2
			K	GL8P10	GL8T10	GL8R10	GL8D10	GL8S10			GL8N10			
		8	A		GL9T100									3
			K		GL8T100									
	+1.	A	GL5P10A		GL5R10A									4
		K	GL4P10A		GL4R10A									
	0.6	8	A	GL9P06		GL9R06	GL9D06			GL9E06	GL9N06			5
			K	GL8P06		GL8R06	GL8D06			GL8E06	GL8N06			
		+1.	A	GL5P06A		GL5R06A								6
			K	GL4P06A		GL4R06A								
	0.56	8	A	GL9P056			GL9D056		GL9H056	GL9E056	GL9N056			7
			K	GL8P056			GL8D056		GL8H056	GL8E056	GL8N056			
	8	A	GL9P156	GL9T156		GL9D156	GL9S156	GL9H156	GL9E156	GL9N156	GL9K156			8
		K	GL8P156	GL8T156		GL8D156	GL8S156	GL8H156	GL8E156	GL8N156	GL8K156			
	0.4	8	A	GL9P04		GL9R04	GL9D04		GL9H04	GL9E04	GL9N04		GL9G04	9
			K	GL8P04		GL8R04	GL8D04		GL8H04	GL8E04	GL8N04		GL8G04	
		8	A	GL9P040	GL9T040	GL9R040	GL9D040	GL9S040	GL9H040	GL9E040	GL9N040	GL9K040		10
			K	GL8P040	GL8T040	GL8R040	GL8D040	GL8S040	GL8H040	GL8E040	GL8N040	GL8K040		
	+1.	A			GL5R04A					GL5N04A			11	
K				GL4R04A					GL4N04A					
0.3	8	A	GL9P03		GL9R03			GL9H03	GL9E03			GL9G03	12	
		K	GL8P03		GL8R03			GL8H03	GL8E03			GL8G03		
	8	A	GL9P03D	GL9T03D	GL9R03D	GL9D03D		GL9H03D	GL9E03D	GL9N03D	GL9K03D		14	
		K	GL8P03D	GL8T03D	GL8R03D	GL8D03D		GL8H03D	GL8E03D	GL8N03D	GL8K03D			
	8	A	GL9P030	GL9T030		GL9D030	GL9S030	GL9H030	GL9E030	GL9N030	GL9K030		15	
		K	GL8P030	GL8T030		GL8D030	GL8S030	GL8H030	GL8E030	GL8N030	GL8K030			
2	0.56	8.8	A	GL7P210		GL7D210				GL7N210			16	
			K	GL6P210		GL6D210				GL6N210				
	1.8	A	GL7P211			GL7D211				GL7N211			17	
		K	GL6P211			GL6D211				GL6N211				
	8.8	A	GL7P220			GL7D220		GL7H220	GL7E220	GL7N220			18	
		K	GL6P220			GL6D220		GL6H220	GL6E220	GL6N220				
	8.8	A	GL7P290						GL7E290				19	
		K	GL6P290						GL6E290					
	1.8	A	GL7P221			GL7D221		GL7H221	GL7E221	GL7N221			20	
		K	GL6P221			GL6D221		GL6H221	GL6E221	GL6N221				
	8.8	A	GL7P240										21	
		K	GL6P240											

*1 Common pin A: anode, K: cathode

*2 HL: High-luminosity

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No. of pins (top view)	Radiation color Radiation shape (Common pin #)	P Red	T Red (HL)*2	R Red	D Red	S Sunset orange	H Yellow	E Yellow- green (HL)*2	N Yellow- green	K Green (HL)*2	G Green	Outline pitch (mm)	
													A
2	88	A	GL3P202		GL3D202			GL3E202	GL3N202			22	
		K	GL3P201		GL3D201			GL3E201	GL3N201				
	18	A	GL3P204		GL3D204			GL3E204	GL3N204			23	
		K	GL3P203		GL3D203			GL3E203	GL3N203				
	88	A	GL7P206U		GL7D206U			GL7E206U	GL7N206U			24	
		K	GL6P206U		GL6D206U			GL6E206U	GL6N206U				
	18	A	GL7P207U		GL7D207U			GL7E207U	GL7N207U			25	
		K	GL6P207U		GL6D207U			GL6E207U	GL6N207U				
	88	A	GL7P206L		GL7D206L			GL7E206L	GL7N206L			26	
		K	GL6P206L		GL6D206L			GL6E206L	GL6N206L				
	88	A	GL7P201		GL7R201	GL7D201		GL7H201	GL7E201	GL7N201			27
		K	GL6P201		GL6R201	GL6D201		GL6H201	GL6E201	GL6N201			
	18	A	GL7P205		GL7R205	GL7D205			GL7E205	GL7N205			28
		K	GL6P205		GL6R205	GL6D205			GL6E205	GL6N205			
	88	A	GL7P230							GL7N230			29
		K	GL6P230							GL6N230			
0.3	88	A	GL7P208U		GL7D208U			GL7E208U	GL7N208U			30	
		K	GL6P208U		GL6D208U			GL6E208U	GL6N208U				
	88	A	GL7P208L		GL7D208L			GL7E208L	GL7N208L			31	
		K	GL6P208L		GL6D208L			GL6E208L	GL6N208L				

*1 Common pin A: anode, K: cathode *2 HL: High-luminosity

1-digit

Character height (inch)	Radiation shape	Radiation color	Structure		Model No.		Absolute maximum ratings						
			Mold	Substrate	Anode common	Cathode common	Continuous forward current I _F /seg (mA)	Peak forward current I _{FM} /seg (mA)	Derating factor		Reverse voltage V _R /seg (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
									DC/seg (mA/°C)	Pulse/seg (mA/°C)			
1.8	8	Red	●		GL9D18	GL8D18	30	50	0.67	1.11	5	-10~+60	-20~+70
		Yellow-green	●		GL9E18	GL8E18	20	50	0.44	1.11	5	-10~+60	-20~+70
1.0	8	Red	●		GL9P10	GL8P10	10	50	0.18	0.91	5	-30~+70	-40~+80
		Red	●		GL9T10	GL8T10	20	100	0.36	1.82	6	-30~+70	-40~+80
		Red	●		GL9R10	GL8R10	25	200	0.45	3.64	6	-30~+70	-40~+80
		Red	●		GL9D10	GL8D10	20	50	0.36	0.91	6	-30~+70	-40~+80
		Sunset orange	●		GL9S10	GL8S10	20	50	0.36	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL9N10	GL8N10	15	50	0.27	0.91	5	-30~+70	-40~+80
	8	Red	●		GL9T100	GL8T100	20	100	0.36	1.82	6	-30~+70	-40~+80
	+1	Red	●		GL5P10A	GL4P10A	10	50	0.18	0.91	5	-30~+70	-40~+80
Red		●		GL5R10A	GL4R10A	25	200	0.45	3.64	6	-30~+70	-40~+80	
0.6	8	Red	●		GL9P06	GL8P06	10	50	0.18	0.91	5	-30~+70	-40~+80
		Red	●		GL9R06	GL8R06	25	200	0.45	3.64	5	-30~+70	-40~+80
		Red	●		GL9D06	GL8D06	20	50	0.36	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL9E06	GL8E06	15	50	0.27	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL9N06	GL8N06	15	50	0.27	0.91	5	-30~+70	-40~+80
	+1	Red	●		GL5P06A	GL4P06A	10	50	0.18	0.91	5	-30~+70	-40~+80
Red	●		GL5R06A	GL4R06A	25	200	0.45	3.64	5	-30~+70	-40~+80		
0.56	8	Red	●		GL9P056	GL8P056	15	50	0.27	0.91	5	-30~+70	-40~+80
		Red	●		GL9D056	GL8D056	20	50	0.36	0.91	5	-30~+70	-40~+80
		Yellow	●		GL9H056	GL8H056	20	50	0.36	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL9E056	GL8E056	15	50	0.27	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL9N056	GL8N056	15	50	0.27	0.91	5	-30~+70	-40~+80

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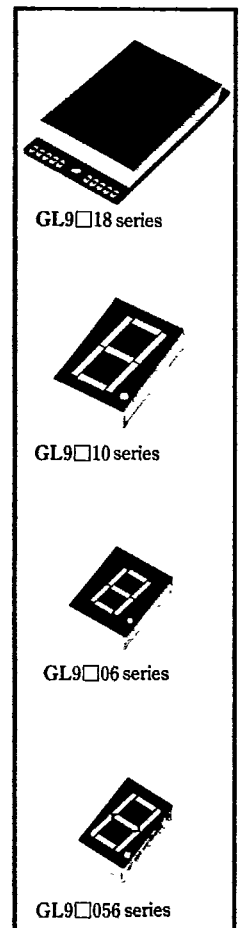
No. of digits (No. of segments)	Radiation color (Common pin or)	Radiation shape	P Red	T Red (HL)*2	R Red	D Red	S Sunset orange	H Yellow	E Yellow-green (HL)*2	N Yellow-green	K Green (HL)*2	G Green	Outline dimensions (Fig.)
2	0.3	88	A	GL7P209U		GL7D209U			GL7E209U	GL7N209U			32
			K	GL6P209U		GL6D209U			GL6E209U	GL6N209U			
2	0.25	88	A	GL7P202	GL7R202			GL7H202	GL7E202	GL7N202			33
			K	GL6P202	GL6R202			GL6H202	GL6E202	GL6N202			
3	0.56	888	A	GL7P310									34
			K	GL6P310									
3	0.3	888	A	GL3P306		GL3D306		GL3H306	GL3E306	GL3N306			35
			K	GL3P305		GL3D305		GL3H305	GL3E305	GL3N305			
4	0.3	:1888	A	GL3P404		GL3D404			GL3E404	GL3N404		GL3G404	36
			K	GL3P403		GL3D403			GL3E403	GL3N403		GL3G403	
4	0.24	8888	A	GL3P412				GL3H412	GL3E412	GL3N412			37
			K	GL3P411				GL3H411	GL3E411	GL3N411			
5	0.3	88888	A	GL3P508D	GL3T508D				GL3E508D				38
			K	GL3P507D	GL3T507D				GL3E507D				
5	0.3	88888	A	GL3P508L				GL3H508L	GL3E508L	GL3N508L			39
			K	GL3P507L				GL3H507L	GL3E507L	GL3N507L			

*1 Common pin A: anode, K: cathode

*2 HL: High-luminosity

Note) □ indicates radiation color symbol.

Electro-optical characteristics									Outline dimensions (Fig.)	Model No.	
Forward voltage V _F (V)		Luminous intensity I _v /seg (mcd)		Peak emission wavelength λ _p (nm)	Spectrum radiation bandwidth Δλ (nm)	Reverse current		Anode common		Cathode common	
TYP.	MAX.	MIN.	TYP.	TYP.	TYP.	Conditions I _R (mA)	MAX. Conditions V _R (V)				
4.0	5.6	2.2	6.4	635	35	20	10	4	1	GL9D18	GL8D18
4.0	5.0	1.9	3.4	565	30	10	10	4		GL9E18	GL8E18
3.8	5.0	0.4	1.2	695	100	5	10	4	2	GL9P10	GL8P10
3.4	4.4	1.5	4.0	660	20	10	10	5		GL9T10	GL8T10
3.3	3.8	0.2	0.5	655	20	20	10	5	2	GL9R10	GL8R10
3.6	4.6	1.0	2.0	635	35	10	10	5		GL9D10	GL8D10
3.8	5.0	1.0	4.5	610	35	10	10	4	2	GL9S10	GL8S10
2.0	2.5	0.4	0.9	565	30	10	10	4		GL9N10	GL8N10
3.4	4.4	1.5	4.0	660	20	10	10	5	3	GL9T100	GL8T100
3.8	5.0	0.4	1.2	695	100	5	10	4	4	GL5P10A	GL4P10A
3.3	3.8	0.2	0.5	655	20	20	10	5		GL5R10A	GL4R10A
1.9	2.5	0.15	0.3	695	100	5	10	4	5	GL9P06	GL8P06
1.6	2.0	0.17	0.5	655	20	20	10	4		GL9R06	GL8R06
1.8	2.2	0.3	0.9	635	35	10	10	4	5	GL9D06	GL8D06
2.0	2.5	1.0	3.0	565	30	10	10	4		GL9E06	GL8E06
2.0	2.5	0.2	0.5	565	30	10	10	4	6	GL9N06	GL8N06
1.9	2.5	0.15	0.3	695	100	5	10	4		GL5P06A	GL4P06A
1.6	2.0	0.17	0.5	655	20	20	10	4	GL5R06A	GL4R06A	
1.9	2.5	0.3	1.0	695	100	5	10	4	7	GL9P056	GL8P056
1.85	2.3	0.6	3.0	635	35	10	10	4		GL9D056	GL8D056
1.9	2.5	1.0	3.6	585	30	10	10	4	7	GL9H056	GL8H056
2.0	2.5	1.0	3.0	565	30	10	10	4		GL9E056	GL8E056
2.0	2.5	0.3	1.0	565	30	10	10	4	7	GL9N056	GL8N056



Numeric and Symbolic LEDs

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Character height (inch)	Radiation shape	Radiation color	Structure		Model No.		Absolute maximum ratings						
			Mold	Substrate	Anode common	Cathode common	Continuous forward current I_F /seg (mA)	Peak forward current I_{FM} /seg (mA)	Derating factor		Reverse voltage V_R /seg (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)
									DC/seg (mA/°C)	Pulse/seg (mA/°C)			
0.56	B	Red	●		GL9P156	GL8P156	15	50	0.27	0.91	5	-30~+70	-40~+80
		Red	●		GL9T156	GL8T156	20	100	0.36	0.91	5	-30~+70	-40~+80
		Red	●		GL9D156	GL8D156	20	50	0.36	0.91	5	-30~+70	-40~+80
		Sunset orange	●		GL9S156	GL8S156	20	50	0.27	0.91	5	-30~+70	-40~+80
		Yellow	●		GL9H156	GL8H156	20	50	0.36	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL9E156	GL8E156	15	50	0.27	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL9N156	GL8N156	15	50	0.27	0.91	5	-30~+70	-40~+80
		Green	●		GL9K156	GL8K156	15	50	0.27	0.91	5	-30~+70	-40~+80
0.4	B.	Red	●		GL9P04	GL8P04	10	50	0.18	0.91	5	-30~+70	-40~+80
		Red	●		GL9R04	GL8R04	25	200	0.45	3.64	5	-30~+70	-40~+80
		Red	●		GL9D04	GL8D04	20	50	0.36	0.91	5	-30~+70	-40~+80
		Yellow	●		GL9H04	GL8H04	20	50	0.36	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL9E04	GL8E04	15	50	0.27	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL9N04	GL8N04	15	50	0.27	0.91	5	-30~+70	-40~+80
		Green	●		GL9G04	GL8G04	15	50	0.27	0.91	5	-30~+70	-40~+80
		Green	●		GL9K04	GL8K04	15	50	0.27	0.91	5	-30~+70	-40~+80
	B.	Red	●		GL9P040	GL8P040	15	50	0.27	0.91	5	-30~+70	-40~+80
		Red	●		GL9T040	GL8T040	20	100	0.36	1.82	5	-30~+70	-40~+80
		Red	●		GL9R040	GL8R040	25	200	0.45	3.64	5	-30~+70	-40~+80
		Red	●		GL9D040	GL8D040	20	50	0.36	0.91	5	-30~+70	-40~+80
		Sunset orange	●		GL9S040	GL8S040	20	50	0.27	0.91	5	-30~+70	-40~+80
		Yellow	●		GL9H040	GL8H040	20	50	0.36	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL9E040	GL8E040	15	50	0.27	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL9N040	GL8N040	15	50	0.27	0.91	5	-30~+70	-40~+80
	+I.	Red	●		GL5R04A	GL4R04A	25	200	0.45	3.64	5	-30~+70	-40~+80
		Yellow-green	●		GL5N04A	GL4N04A	15	50	0.27	0.91	5	-30~+70	-40~+80
0.3	B.	Red	●		GL9P03	GL8P03	10	50	0.18	0.91	5	-30~+70	-40~+80
		Red	●		GL9R03	GL8R03	25	200	0.45	3.64	5	-30~+70	-40~+80
		Yellow	●		GL9H03	GL8H03	20	50	0.36	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL9E03	GL8E03	15	50	0.27	0.91	5	-30~+70	-40~+80
		Green	●		GL9G03	GL8G03	15	50	0.27	0.91	5	-30~+70	-40~+80
	B	Red	●		GL9P03D	GL8P03D	10	50	0.18	0.91	5	-30~+70	-40~+80
		Red	●		GL9T03D	GL8T03D	20	100	0.36	1.82	5	-30~+70	-40~+80
		Red	●		GL9R03D	GL8R03D	25	200	0.45	3.64	5	-30~+70	-40~+80
		Red	●		GL9D03D	GL8D03D	20	50	0.36	0.91	5	-30~+70	-40~+80
		Yellow	●		GL9H03D	GL8H03D	20	50	0.36	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL9E03D	GL8E03D	15	50	0.27	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL9N03D	GL8N03D	15	50	0.27	0.91	5	-30~+70	-40~+80
		Green	●		GL9K03D	GL8K03D	15	50	0.27	0.91	5	-30~+70	-40~+80
	B	Red	●		GL9P030	GL8P030	10	50	0.18	0.91	5	-30~+70	-40~+80
		Red	●		GL9T030	GL8T030	20	100	0.36	1.82	5	-30~+70	-40~+80
		Red	●		GL9D030	GL8D030	20	50	0.36	0.91	5	-30~+70	-40~+80
		Sunset orange	●		GL9S030	GL8S030	20	50	0.36	0.91	5	-30~+70	-40~+80
		Yellow	●		GL9H030	GL8H030	20	50	0.36	0.91	5	-30~+70	-40~+80
Yellow-green		●		GL9E030	GL8E030	15	50	0.27	0.91	5	-30~+70	-40~+80	
Yellow-green		●		GL9N030	GL8N030	15	50	0.27	0.91	5	-30~+70	-40~+80	
Green		●		GL9K030	GL8K030	15	50	0.27	0.91	5	-30~+70	-40~+80	

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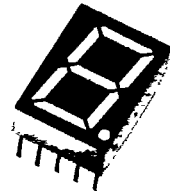
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Note) □ indicates radiation color symbol.

Electro-optical characteristics									Outline dimensions (Fig.)	Model No.		
Forward voltage V _F (V)		Luminous intensity I _v /seg (mcd)		Peak emission wavelength λ _p (nm)	Spectrum radiation bandwidth Δλ (nm)	Reverse current		Conditions I _r (mA)		Conditions V _r (V)	Anode common	Cathode common
TYP.	MAX.	MIN.	TYP.	TYP.	TYP.	MAX.	MAX.					
1.9	2.5	0.3	1.0	695	100	5	10	4	8	GL9P156	GL8P156	
1.7	2.2	2.5	6.5	660	20	10	10	4		GL9T156	GL8T156	
1.85	2.3	1.0	4.0	635	35	10	10	4		GL9D156	GL8D156	
1.9	2.5	1.32	3.8	610	35	10	10	4		GL9S156	GL8S156	
1.9	2.5	0.6	3.0	585	30	10	10	4		GL9H156	GL8H156	
2.0	2.5	1.0	3.0	565	30	10	10	4		GL9E156	GL8E156	
2.0	2.5	0.3	1.0	565	30	10	100	3		GL9N156	GL8N156	
2.0	2.5	0.82	2.1	555	30	10	10	4		GL9K156	GL8K156	
1.85	2.5	0.15	0.3	695	100	5	10	4		9	GL9P04	GL8P04
1.6	2.0	0.1	0.5	655	20	20	10	4	GL9R04		GL8R04	
1.85	2.3	1.14	4.0	635	35	10	10	4	GL9D04		GL8D04	
1.9	2.5	0.45	1.35	585	30	10	10	4	GL9H04		GL8H04	
2.0	2.5	1.0	2.0	565	30	10	10	4	GL9E04		GL8E04	
2.0	2.5	0.2	0.5	565	30	10	10	4	GL9N04		GL8N04	
2.05	2.5	0.08	0.15	555	30	10	10	4	GL9G04		GL8G04	
1.9	2.5	0.3	0.6	695	100	5	10	4	10	GL9P040	GL8P040	
1.7	2.2	2.0	5.0	660	20	10	10	4		GL9T040	GL8T040	
1.6	2.0	0.1	0.5	655	20	20	10	4		GL9R040	GL8R040	
1.85	2.3	1.0	3.0	635	35	10	10	4		GL9D040	GL8D040	
1.9	2.5	1.0	2.6	610	35	10	10	4		GL9S040	GL8S040	
1.9	2.5	0.6	2.5	585	30	10	10	4		GL9H040	GL8H040	
2.0	2.5	1.0	3.0	565	30	10	10	4		GL9E040	GL8E040	
2.0	2.5	0.3	1.0	565	30	10	10	4		GL9N040	GL8N040	
2.0	2.5	0.63	1.75	555	30	10	10	4		GL9K040	GL8K040	
1.6	2.0	0.15	0.35	655	20	20	10	4	11	GL5R04A	GL4R04A	
2.0	2.5	0.3	1.0	565	30	10	10	4		GL5N04A	GL4N04A	
1.85	2.5	0.15	0.3	695	100	5	10	4	Anode common	GL9P03	GL8P03	
1.6	2.0	0.1	0.25	655	20	20	10	4		GL9R03	GL8R03	
1.9	2.5	0.45	1.35	585	30	10	10	4		GL9H03	GL8H03	
2.0	2.5	1.0	2.0	565	30	10	10	4		GL9E03	GL8E03	
2.05	2.5	0.08	0.15	555	30	10	100	4		GL9G03	GL8G03	
1.9	2.5	0.15	0.3	695	100	5	10	4	Cathode common	GL9P03D	GL8P03D	
1.7	2.2	1.0	3.0	660	20	10	10	4		GL9T03D	GL8T03D	
1.6	2.0	0.1	0.25	655	20	20	10	4		GL9R03D	GL8R03D	
1.8	2.3	0.3	0.8	635	35	10	10	4		GL9D03D	GL8D03D	
1.9	2.5	0.45	1.35	585	30	10	10	4		GL9H03D	GL8H03D	
2.0	2.5	1.0	2.0	565	30	10	10	4		GL9E03D	GL8E03D	
2.0	2.5	0.2	0.5	565	30	10	10	4		GL9N03D	GL8N03D	
2.0	2.5	0.37	0.9	555	30	10	10	4		GL9K03D	GL8K03D	
1.9	2.5	0.15	0.3	695	100	5	10	4	15	GL9P030	GL8P030	
1.7	2.2	1.5	4.0	660	20	10	10	4		GL9T030	GL8T030	
1.85	2.3	0.6	1.5	635	35	10	10	4		GL9D030	GL8D030	
1.9	2.5	0.6	1.5	610	35	10	10	4		GL9S030	GL8S030	
1.9	2.5	0.78	2.6	585	30	10	10	4		GL9H030	GL8H030	
2.0	2.5	1.0	2.5	565	30	10	10	4		GL9E030	GL8E030	
2.0	2.5	0.4	1.5	565	30	10	10	4		GL9N030	GL8N030	
2.0	2.5	0.63	1.56	555	30	10	10	4		GL9K030	GL8K030	



GL9□156 series



GL9□04 series



GL9□040 series



GL9□03 series



GL9□03D series



GL9□030 series

Numeric and Symbolic LEDs

SHARP ELEK/ MELEC DIV

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T-41-33

2-digit

Character height (inch)	Radiation shape	Radiation color	Structure		Model No.		Absolute maximum ratings							
			Mold	Substrate	Anode common	Cathode common	Continuous forward current I_F /seg (mA)	Peak forward current I_{FM} /seg (mA)	Derating factor		Reverse voltage V_R /seg (V)	Operating temperature T_{opr} (°C)	Storage temperature T_{stg} (°C)	
									DC/seg (mA/°C)	Pulse/seg (mA/°C)				
0.56	8.8	Red	●		GL7P210	GL6P210	15	50	0.27	0.91	5	-30~+70	-40~+80	
		Red	●		GL7D210	GL6D210	20	50	0.36	0.91	5	-30~+70	-40~+80	
		Yellow-green	●		GL7N210	GL6N210	15	50	0.27	0.91	5	-30~+70	-40~+80	
	1.8	Red	●		GL7P211	GL6P211	15	50	0.27	0.91	5	-30~+70	-40~+80	
		Red	●		GL7D211	GL6D211	20	50	0.36	0.91	5	-30~+70	-40~+80	
		Yellow-green	●		GL7N211	GL6N211	15	50	0.27	0.91	5	-30~+70	-40~+80	
	8.8	Red	●		GL7P220	GL6P220	15	50	0.27	0.91	5	-30~+70	-40~+80	
		Red	●		GL7D220	GL6D220	20	50	0.36	0.91	5	-30~+70	-40~+80	
		Yellow	●		GL7H220	GL6H220	20	50	0.36	0.91	5	-30~+70	-40~+80	
		Yellow-green	●		GL7E220	GL6E220	15	50	0.27	0.91	5	-30~+70	-40~+80	
	8.8	Yellow-green	●		GL7N220	GL6N220	15	50	0.27	0.91	5	-30~+70	-40~+80	
		8.8	Red	●		GL7P290	GL6P290	15	50	0.33	0.11	5	-30~+70	-40~+80
			Yellow-green	●		GL7E290	GL6E290	15	50	0.33	0.11	5	-30~+70	-40~+80
		1.8	Red	●		GL7P221	GL6P221	15	50	0.27	0.91	5	-30~+70	-40~+80
	Red		●		GL7D221	GL6D221	20	50	0.36	0.91	5	-30~+70	-40~+80	
	Yellow		●		GL7H221	GL6H221	20	50	0.36	0.91	5	-30~+70	-40~+80	
	Yellow-green		●		GL7E221	GL6E221	15	50	0.27	0.91	5	-30~+70	-40~+80	
	Yellow-green		●		GL7N221	GL6N221	15	50	0.27	0.91	5	-30~+70	-40~+80	
	0.4	8.8	Red	●		GL7P240	GL6P240	15	50	0.33	1.11	5	-10~+60	-20~+70
			Red	●		GL3P202	GL3P201	15	50	0.33	1.11	5	-10~+60	-20~+70
			Red	●		GL3D202	GL3D201	15	50	0.33	1.11	5	-10~+60	-20~+70
			Yellow-green	●		GL3E202	GL3E201	15	50	0.33	1.11	5	-10~+60	-20~+70
		1.8	Yellow-green	●		GL3N202	GL3N201	15	50	0.33	1.11	5	-10~+60	-20~+70
			Red	●		GL3P204	GL3P203	15	50	0.33	1.11	5	-10~+60	-20~+70
Red			●		GL3D204	GL3D203	15	50	0.33	1.11	5	-10~+60	-20~+70	
Yellow-green			●		GL3E204	GL3E203	15	50	0.33	1.11	5	-10~+60	-20~+70	
8.8		Yellow-green	●		GL3N204	GL3N203	15	50	0.33	1.11	5	-10~+60	-20~+70	
		Red	●		GL7P206U	GL6P206U	15	50	0.33	1.11	5	-10~+60	-20~+70	
		Red	●		GL7D206U	GL6D206U	15	50	0.33	1.11	5	-10~+60	-20~+70	
		Yellow-green	●		GL7E206U	GL6E206U	15	50	0.33	1.11	5	-10~+60	-20~+70	
1.8		Yellow-green	●		GL7N206U	GL6N206U	15	50	0.33	1.11	5	-10~+60	-20~+70	
		Red	●		GL7P207U	GL6P207U	15	50	0.33	1.11	5	-10~+60	-20~+70	
		Red	●		GL7D207U	GL6D207U	15	50	0.33	1.11	5	-10~+60	-20~+70	
		Yellow-green	●		GL7E207U	GL6E207U	15	50	0.33	1.11	5	-10~+60	-20~+70	
8.8		Yellow-green	●		GL7N207U	GL6N207U	15	50	0.33	1.11	5	-10~+60	-20~+70	
		Red	●		GL7P206L	GL6P206L	15	50	0.33	1.11	5	-10~+60	-20~+70	
		Red	●		GL7D206L	GL6D206L	15	50	0.33	1.11	5	-10~+60	-20~+70	
		Yellow-green	●		GL7E206L	GL6E206L	15	50	0.33	1.11	5	-10~+60	-20~+70	
8.8		Yellow-green	●		GL7N206L	GL6N206L	15	50	0.33	1.11	5	-10~+60	-20~+70	
		Red	●		GL7P201	GL6P201	10	50	0.18	0.91	5	-30~+70	-40~+80	
		Red	●		GL7D201	GL6D201	20	50	0.36	0.91	5	-30~+70	-40~+80	
		Red	●		GL7R201	GL6R201	25	200	0.45	3.64	5	-30~+70	-40~+80	
	Yellow	●		GL7H201	GL6H201	20	50	0.36	0.91	5	-30~+70	-40~+80		
	Yellow-green	●		GL7E201	GL6E201	15	50	0.27	0.91	5	-30~+70	-40~+80		
Yellow-green	●		GL7N201	GL6N201	15	50	0.27	0.91	5	-30~+70	-40~+80			

Numeric and Symbolic LEDs

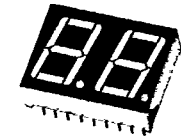
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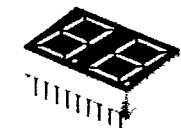
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Note) U indicates radiation color symbol.

Electro-optical characteristics									Outline dimensions (Fig.)	Model No.		
Forward voltage V_F (V)		Luminous intensity I_V /seg (mcd)		Peak emission wavelength λ_p (nm)	Spectrum radiation bandwidth $\Delta\lambda$ (nm)	Reverse current		Conditions I_R (mA)		Conditions V_R (V)	Anode common	Cathode common
TYP.	MAX.	MIN.	TYP.	TYP.	TYP.	I_2 (μ A/seg)	MAX.					
1.9	2.5	0.3	1.0	695	100	5	10	4	16	GL7P210	GL6P210	
1.85	2.3	0.6	3.0	635	35	10	10	4		GL7D210	GL6D210	
2.0	2.5	0.3	1.0	565	30	10	10	4		GL7N210	GL6N210	
1.9	2.5	0.3	1.0	695	100	5	10	4	17	GL7P211	GL6P211	
1.85	2.3	0.6	3.0	635	35	10	10	4		GL7D211	GL6D211	
2.0	2.5	0.1	0.3	565	30	10	10	4		GL7N211	GL6N211	
1.9	2.5	0.3	1.0	695	100	5	10	4	18	GL7P220	GL6P220	
1.85	2.5	1.0	4.0	635	35	10	10	4		GL7D220	GL6D220	
1.9	2.5	1.32	4.5	585	30	10	10	4		GL7H220	GL6H220	
2.0	2.5	1.0	3.0	565	30	10	10	4		GL7E220	GL6E220	
2.0	2.5	0.3	1.0	565	30	10	10	4	19	GL7N220	GL6N220	
1.9	2.5	0.25	0.7	695	100	5	10	4		GL7P290	GL6P290	
2.0	2.5	1.1	2.7	565	30	10	10	4	GL7E290	GL6E290		
1.9	2.5	0.3	1.0	695	100	5	10	4	20	GL7P221	GL6P221	
1.85	2.5	1.0	4.0	635	35	10	10	4		GL7D221	GL6D221	
1.9	2.5	1.32	4.5	585	30	10	10	4		GL7H221	GL6H221	
2.0	2.5	1.0	3.0	565	30	10	10	4		GL7E221	GL6E221	
2.0	2.5	0.3	1.0	565	30	10	10	4		GL7N221	GL6N221	
1.9	2.5	0.15	0.4	695	100	5	10	4	21	GL7P240	GL6P240	
1.9	2.5	0.15	0.4	695	100	5	10	4		GL3P202	GL3P201	
1.85	2.5	0.2	0.6	635	35	10	10	4		GL3D202	GL3D201	
2.0	2.5	0.3	1.0	565	30	10	10	4		GL3E202	GL3E201	
2.0	2.5	0.1	0.3	565	30	10	10	4	22	GL3N202	GL3N201	
1.9	2.5	0.1	0.25	695	100	5	10	4		GL3P204	GL3P203	
1.85	2.5	0.2	0.6	635	35	10	10	4		GL3D204	GL3D203	
2.0	2.5	0.3	1.0	565	30	10	10	4		GL3E204	GL3E203	
2.0	2.5	0.2	0.43	565	30	10	10	4	23	GL3N204	GL3N203	
1.9	2.5	0.15	0.4	695	100	5	10	4		GL7P206U	GL6P206U	
1.85	2.5	0.2	0.6	635	35	10	10	4		GL7D206U	GL6D206U	
2.0	2.5	0.3	1.0	565	30	10	10	4		GL7E206U	GL6E206U	
2.0	2.5	0.1	0.3	565	30	10	10	4	24	GL7N206U	GL6N206U	
1.9	2.5	0.15	0.4	695	100	5	10	4		GL7P207U	GL6P207U	
1.85	2.5	0.2	0.6	635	35	10	10	4		GL7D207U	GL6D207U	
2.0	2.5	0.3	1.0	565	30	10	10	4		GL7E207U	GL6E207U	
2.0	2.5	0.1	0.3	565	30	10	10	4	25	GL7N207U	GL6N207U	
1.9	2.5	0.22	0.4	695	100	5	10	4		GL7P206L	GL6P206L	
1.85	2.5	0.2	0.6	635	35	10	10	4		GL7D206L	GL6D206L	
2.0	2.5	0.3	1.0	565	30	10	10	4		GL7E206L	GL6E206L	
2.0	2.5	0.1	0.3	565	30	10	10	4	26	GL7N206L	GL6N206L	
1.9	2.5	0.15	0.3	695	100	5	10	4		GL7P201	GL6P201	
1.8	2.3	0.3	0.8	635	35	10	10	4		GL7D201	GL6D201	
1.6	2.0	0.15	0.35	655	20	20	10	4		GL7R201	GL6R201	
1.9	2.5	0.45	1.35	585	30	10	10	4	27	GL7H201	GL6H201	
2.0	2.5	1.0	2.0	565	30	10	10	4		GL7E201	GL6E201	
2.0	2.5	0.2	0.5	565	30	10	10	4		GL7N201	GL6N201	



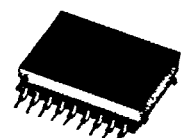
GL7□210 series



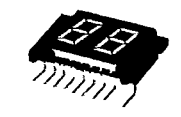
GL7□220 series



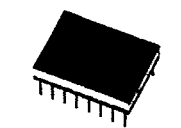
GL7□290 series



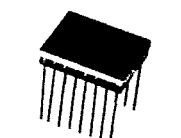
GL7□240 series



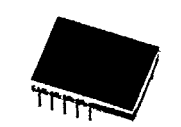
GL3□202 series



GL7□206U series



GL7□206L series



GL7□207U series

Numeric and Symbolic LEDs

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T-4133

Character height (inch)	Radiation shape	Radiation color	Structure		Model No.		Absolute maximum ratings							
			Mold	Substrate	Anode common	Cathode common	Continuous forward current I_F /seg (mA)	Peak forward current I_{FM} /seg (mA)	Derating factor		Reverse voltage V_R /seg (V)	Operating temperature T_{opr} (°C)	Storage temperature T_{stg} (°C)	
									DC/seg (mA/°C)	Pulse/seg (mA/°C)				
0.4	18	Red	●		GL7P205	GL6P205	10	50	0.18	0.91	5	-30~+70	-40~+80	
		Red	●		GL7D205	GL6D205	20	50	0.36	0.91	5	-30~+70	-40~+80	
		Red	●		GL7R205	GL6R205	25	200	0.45	3.64	5	-30~+70	-40~+80	
		Yellow-green	●		GL7E205	GL6E205	15	50	0.27	0.91	5	-30~+70	-40~+80	
		Yellow-green	●		GL7N205	GL6N205	15	50	0.27	0.91	5	-30~+70	-40~+80	
		88	Red		●	GL7P230	GL6P230	15	50	0.33	1.11	5	-10~+60	-20~+70
		Yellow-green		●	GL7N230	GL6N230	15	50	0.33	1.11	5	-10~+60	-20~+70	
0.3	88	Red		●	GL7P208U	GL6P208U	15	50	0.33	1.11	5	-10~+60	-20~+70	
		Red		●	GL7D208U	GL6D208U	15	50	0.33	1.11	5	-10~+60	-20~+70	
		Yellow-green		●	GL7E208U	GL6E208U	15	50	0.33	1.11	5	-10~+60	-20~+70	
		Yellow-green		●	GL7N208U	GL6N208U	15	50	0.33	1.11	5	-10~+60	-20~+70	
		88	Red		●	GL7P208L	GL6P208L	15	50	0.33	1.11	5	-10~+60	-20~+70
			Red		●	GL7D208L	GL6D208L	15	50	0.33	1.11	5	-10~+60	-20~+70
			Yellow-green		●	GL7E208L	GL6E208L	15	50	0.33	1.11	5	-10~+60	-20~+70
			Yellow-green		●	GL7N208L	GL6N208L	15	50	0.33	1.11	5	-10~+60	-20~+70
		18	Red		●	GL7P209U	GL6P209U	15	50	0.33	1.11	5	-10~+60	-20~+70
			Red		●	GL7D209U	GL6D209U	15	50	0.33	1.11	5	-10~+60	-20~+70
			Yellow-green		●	GL7E209U	GL6E209U	15	50	0.33	1.11	5	-10~+60	-20~+70
			Yellow-green		●	GL7N209U	GL6N209U	15	40	0.33	1.11	5	-10~+60	-20~+70
0.25	88	Red	●		GL7P202	GL6P202	10	50	0.18	0.91	5	-30~+70	-40~+80	
		Red	●		GL7R202	GL6R202	25	200	0.45	3.64	5	-30~+70	-40~+80	
		Yellow	●		GL7H202	GL6H202	20	50	0.36	0.91	5	-30~+70	-40~+80	
		Yellow-green	●		GL7E202	GL6E202	15	50	0.27	0.91	5	-30~+70	-40~+80	
		Yellow-green	●		GL7N202	GL6N202	15	50	0.27	0.91	5	-30~+70	-40~+80	

3-digit

Character height (inch)	Radiation shape	Radiation color	Structure		Model No.		Absolute maximum ratings						
			Mold	Substrate	Anode common	Cathode common	Continuous forward current I_F /seg (mA)	Peak forward current I_{FM} /seg (mA)	Derating factor		Reverse voltage V_R /seg (V)	Operating temperature T_{opr} (°C)	Storage temperature T_{stg} (°C)
									DC/seg (mA/°C)	Pulse/seg (mA/°C)			
0.56	888	Red		●	GL7P310	GL6P310	15	50	0.33	1.11	5	-10~+60	-20~+70
0.3	888	Red	●		GL3P306	GL3P305	15	50	0.27	0.91	5	-30~+70	-40~+80
		Red	●		GL3D306	GL3D305	20	50	0.36	0.91	5	-30~+70	-40~+80
		Yellow	●		GL3H306	GL3H305	20	50	0.36	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL3E306	GL3E305	15	50	0.27	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL3N306	GL3N305	15	50	0.27	0.91	5	-30~+70	-40~+80

Numeric and Symbolic LEDs

SHARP ELEK/ MELEC DIV

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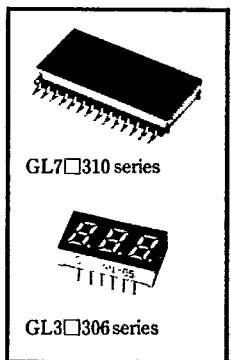
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Note) □ indicates radiation color symbol.

Electro-optical characteristics									Outline dimensions (Fig.)	Model No.		
Forward voltage V_F (V)		Luminous intensity I_V /seg (mcd)		Peak emission wavelength λ_p (nm)	Spectrum radiation bandwidth $\Delta\lambda$ (nm)	Reverse current		Conditions I_F (mA)		Conditions V_R (V)	Anode common	Cathode common
TYP.	MAX.	MIN.	TYP.	TYP.	TYP.	I_R (μ A/seg)	MAX.					
1.9	2.5	0.15	0.3	695	100	5	10	4	28	GL7P205	GL6P205	
1.8	2.3	0.3	0.8	635	35	10	10	4		GL7D205	GL6D205	
1.6	2.0	0.15	0.35	655	20	20	10	4		GL7R205	GL6R205	
2.0	2.5	1.0	2.0	565	30	10	10	4		GL7E205	GL6E205	
2.0	2.5	0.2	0.5	565	30	10	10	4		GL7N205	GL6N205	
1.9	2.5	0.22	0.4	695	100	5	10	4	29	GL7P230	GL6P230	
2.0	2.5	0.1	0.3	565	30	10	10	4		GL7N230	GL6N230	
1.9	2.5	0.08	0.2	695	100	5	10	4	30	GL7P208U	GL6P208U	
1.9	2.5	0.1	0.4	635	35	10	10	4		GL7D208U	GL6D208U	
2.0	2.5	0.2	0.6	565	30	10	10	4		GL7E208U	GL6E208U	
2.0	2.5	0.1	0.2	565	30	10	10	4		GL7N208U	GL6N208U	
1.9	2.5	0.08	0.2	695	100	5	10	4	31	GL7P208L	GL6P208L	
2.0	2.5	0.1	0.4	635	35	10	10	4		GL7D208L	GL6D208L	
2.0	2.5	0.2	0.6	565	30	10	10	4		GL7E208L	GL6E208L	
2.0	2.5	0.1	0.2	565	30	10	10	4		GL7N208L	GL6N208L	
1.9	2.5	0.08	0.2	695	100	5	10	4	32	GL7P209U	GL6P209U	
1.9	2.5	0.1	0.4	635	35	10	10	4		GL7D209U	GL6D209U	
2.0	2.5	0.2	0.6	565	30	10	10	4		GL7E209U	GL6E209U	
2.0	2.5	0.1	0.2	565	30	10	10	4		GL7N209U	GL6N209U	
1.85	2.5	0.15	0.3	695	100	5	100	3	33	GL7P202	GL6P202	
1.6	2.0	0.15	0.35	655	20	20	100	3		GL7R202	GL6R202	
1.9	2.5	0.15	0.35	585	30	10	10	4		GL7H202	GL6H202	
2.0	2.5	0.6	1.8	565	30	10	10	4		GL7E202	GL6E202	
2.0	2.5	0.2	0.5	565	30	10	10	4		GL7N202	GL6N202	



Electro-optical characteristics									Outline dimensions (Fig.)	Model No.		
Forward voltage V_F (V)		Luminous intensity I_V /seg (mcd)		Peak emission wavelength λ_p (nm)	Spectrum radiation bandwidth $\Delta\lambda$ (nm)	Reverse current		Conditions I_F (mA)		Conditions V_R (V)	Anode common	Cathode common
TYP.	MAX.	MIN.	TYP.	TYP.	TYP.	I_R (μ A/seg)	MAX.					
1.9	2.5	0.15	0.4	695	100	5	10	4	34	GL7P310	GL6P310	
1.9	2.5	0.4	1.0	695	100	5	10	4		GL3P306	GL3P305	
1.85	2.3	0.6	1.5	635	35	10	10	4	35	GL3D306	GL3D305	
1.9	2.5	0.78	2.6	585	30	10	10	4		GL3H306	GL3H305	
2.0	2.5	1.35	2.85	565	30	10	10	4		GL3E306	GL3E305	
2.0	2.5	0.45	1.45	565	30	10	10	4		GL3N306	GL3N305	



Numeric and Symbolic LEDs

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4-digit

Character height (inch)	Radiation shape	Radiation color	Structure		Model No.		Absolute maximum ratings						
			Mold	Substrate	Anode common	Cathode common	Continuous forward current I_F /seg (mA)	Peak forward current I_{FM} /seg (mA)	Derating factor		Reverse voltage V_R /seg (V)	Operating temperature T_{opr} (°C)	Storage temperature T_{stg} (°C)
									DC/seg (mA/°C)	Pulse/seg (mA/°C)			
0.3	:18:88	Red	●		GL3P404	GL3P403	10	50	0.18	0.91	5	-30~+70	-40~+80
		Red	●		GL3D404	GL3D403	20	50	0.36	0.91	4	-30~+70	-40~+80
		Yellow-green	●		GL3E404	GL3E403	15	50	0.27	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL3N404	GL3N403	15	50	0.27	0.91	5	-30~+70	-40~+80
		Green	●		GL3G404	GL3G403	15	50	0.18	0.91	5	-30~+70	-40~+80
0.24	88:88	Red	●		GL3P412	GL3P411	10	50	0.18	0.91	5	-30~+70	-40~+80
		Yellow	●		GL3H412	GL3H411	20	50	0.36	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL3E412	GL3E411	15	50	0.27	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL3N412	GL3N411	15	50	0.27	0.91	5	-30~+70	-40~+80

5-digit

Character height (inch)	Radiation shape	Radiation color	Structure		Model No.		Absolute maximum ratings						
			Mold	Substrate	Anode common	Cathode common	Continuous forward current I_F /seg (mA)	Peak forward current I_{FM} /seg (mA)	Derating factor		Reverse voltage V_R /seg (V)	Operating temperature T_{opr} (°C)	Storage temperature T_{stg} (°C)
									DC/seg (mA/°C)	Pulse/seg (mA/°C)			
0.3	88888	Red	●		GL3P508D	GL3P507D	10	50	0.18	0.91	5	-30~+70	-40~+80
		Red	●		GL3T508D	GL3T507D	20	100	0.36	1.82	5	-30~+70	-40~+80
		Yellow-green	●		GL3E508D	GL3E507D	15	50	0.27	0.91	5	-30~+70	-40~+80
0.3	88888	Red	●		GL3P508L	GL3P507L	10	50	0.18	0.91	5	-30~+70	-40~+80
		Yellow	●		GL3H508L	GL3H507L	20	50	0.36	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL3E508L	GL3E507L	15	50	0.27	0.91	5	-30~+70	-40~+80
		Yellow-green	●		GL3N508L	GL3N507L	15	50	0.27	0.91	5	-30~+70	-40~+80

Numeric and Symbolic LEDs

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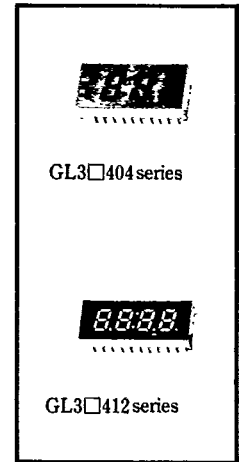
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Note) □ indicates radiation color symbol.

Electro-optical characteristics									Outline dimensions (Fig.)	Model No.	
Forward voltage V_F (V)		Luminous intensity I_V /seg (mcd)		Peak emission wavelength λ_p (nm)	Spectrum radiation bandwidth $\Delta\lambda$ (nm)	Reverse current				Anode common	Cathode common
TYP.	MAX.	MIN.	TYP.	TYP.	TYP.	Condi- tions I_F (mA)	I_R (μ A/seg) MAX.	Condi- tions V_R (V)			
1.9	2.5	0.15	0.3	695	100	5	10	4	36	GL3P404	GL3P403
1.8	2.3	0.3	0.8	635	35	10	100	3		GL3D404	GL3D403
2.0	2.5	0.8	2.0	565	30	10	10	4		GL3E404	GL3E403
2.0	2.5	0.2	0.5	565	30	10	10	4		GL3N404	GL3N403
2.0	2.5	0.08	0.15	555	25	10	10	4		GL3G404	GL3G403
1.9	2.5	0.1	0.25	695	100	5	10	4	37	GL3P412	GL3P411
1.9	2.5	0.15	0.6	585	30	10	10	4		GL3H412	GL3H411
2.0	2.5	0.3	0.7	565	30	10	10	4		GL3E412	GL3E411
2.0	2.5	0.1	0.25	565	30	10	10	4		GL3N412	GL3N411



Electro-optical characteristics									Outline dimensions (Fig.)	Model No.	
Forward voltage V_F (V)		Luminous intensity I_V /seg (mcd)		Peak emission wavelength λ_p (nm)	Spectrum radiation bandwidth $\Delta\lambda$ (nm)	Reverse current				Anode common	Cathode common
TYP.	MAX.	MIN.	TYP.	TYP.	TYP.	Condi- tions I_F (mA)	I_R (μ A/seg) MAX.	Condi- tions V_R (V)			
1.9	2.5	0.15	0.3	695	100	5	10	4	38	GL3P508D	GL3P507D
1.7	2.2	1.5	4.0	660	20	10	10	4		GL3T508D	GL3T507D
2.0	2.5	0.3	0.8	565	30	10	10	4		GL3E508D	GL3E507D
1.9	2.5	0.15	0.3	695	100	5	10	4	39	GL3P508L	GL3P507L
1.9	2.5	0.25	0.75	585	30	10	10	4		GL3H508L	GL3H507L
2.0	2.5	0.3	0.8	565	30	10	10	4		GL3E508L	GL3E507L
2.0	2.5	0.2	0.45	565	30	10	10	4		GL3N508L	GL3N507L

