



High-Luminosity (AlGaInP) LED Series

(Ta = 25°C)

Radiation color	Green	Yellow-green	Amber	Sunset orange	Orange	Red	
Series	ZG, JG	ZE, JE	ZV, JV, YV	ZS, JS, YS	ZJ, JJ, YJ	ZR, JR	JU
Dominant emission wavelength (nm)	(560)	(572)	(588)	(605)	(618)	(630)	(638)
Radiation material	AlGaInP on GaAs						

High-Luminosity (InGaN) LED Series

(Ta = 25°C)

Radiation color	Blue	Green
Series	BC	GC
Dominant emission wavelength (nm)	(470)	(525)
Radiation material	InGaN	

White Type LED Series

(Ta = 25°C)

Radiation color	White
Series	BW
Color range (x, y)	(0.31, 0.31)
Radiation material	InGaN + Fluorescent powder

Pastel Color LED Series

(Ta = 25°C)

Radiation color	Light blue	Lemon yellow	Purple
Series	CA	CY	CV
Color range (x, y)	(0.17, 0.20)	(0.42, 0.48)	(0.35, 0.15)
Radiation material	InGaN + Fluorescent powder		

LED Series

(Ta = 25°C)

Radiation color	Green	Yellow-green	Yellow-green (High-luminosity)	Yellow	Sunset orange	Red	Red	Red (High-luminosity)	Red (High-luminosity)	Red
Series	KG, K	EG, E, C*	FG, F	HY, H	HS, S	HD, D	HA, A	TR, T	UR, U	PR, P
Peak emission wavelength (nm)	555	565	565	585	610	635	650	660	660	695
Radiation material	GaP	GaP	GaP	GaAsP on GaP	GaAsP on GaP	GaAsP on GaP	GaAsP on GaP	GaAlAs on GaAs Single hetero	GaAlAs on GaAlAs Double hetero	GaP

* C is the opposite polarity of EG's.

High-Luminosity (AlGaInP) LED Lamps

(If = 20 mA, Ta = 25°C)

Appearance	Radiation shape (mm)	Resin type			High-luminosity														
					JG, ZG (Green)		JE, ZE (Yellow-green)		JV, ZV (Amber)		JS, ZS (Sunset orange)		ZJ, JJ (Orange)		ZR, JR, JU (Red)				
		Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion	Model No.	Luminous intensity (mcd) TYP.	Model No.	Luminous intensity (mcd) TYP.	Model No.	Luminous intensity (mcd) TYP.	Model No.	Luminous intensity (mcd) TYP.	Model No.	Luminous intensity (mcd) TYP.	Model No.	Luminous intensity (mcd) TYP.		
Cylinder	ø3			●					GL3ZV402B0SE	400		GL3ZS402B0SE	400		GL3ZJ402B0SE	400	GL3ZR402B0SE	250	
				●		GL3JG402B0SE	85		GL3JE402B0SE	200						GL3JR402B0S3	200		
				●						GL3ZV802B0SE	200		GL3ZS802B0SE	210		GL3ZJ802B0SE	230	GL3ZR802B0SE	150
		●							GL3JV404B0SE	280		GL3JS404B0SE	280		GL3JJ404B0SE	200			
		●							GL3JV804B0SE	110		GL3JS804B0SE	120		GL3JJ804B0SE	100			
	ø5			●					GL5ZV152B0SE	2 700		GL5ZS152B0SE	3 000		GL5ZJ152B0SE	3 000	GL5ZR152B0SE	2 000	
				●					GL5ZV302B0SE	900		GL5ZS302B0SE	1 000		GL5ZJ302B0SE	900	GL5ZR302B0SE	600	
				●					GL5JV302B0SE	640		GL5JS302B0SE	680		GL5JJ302B0SE	570			
	ø10			●					GL0ZV042B0S	16 900		GL0ZS042B0S	22 600		GL0ZJ042B0S	18 500			
	Oval	Long: 5.8 Short: 4.6			●					GL6ZV27	750		GL6ZS27	850		GL6ZJ27	750	GL6ZR27	360
				●					GL5JV7D2D0SE	210		GL5JS7D2D0SE	230		GL5JJ7D2D0SE	190			

Taped model is also available.

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HIGH-LUMINOSITY LED LAMPS

☆New product



High-Luminosity LED Lamps

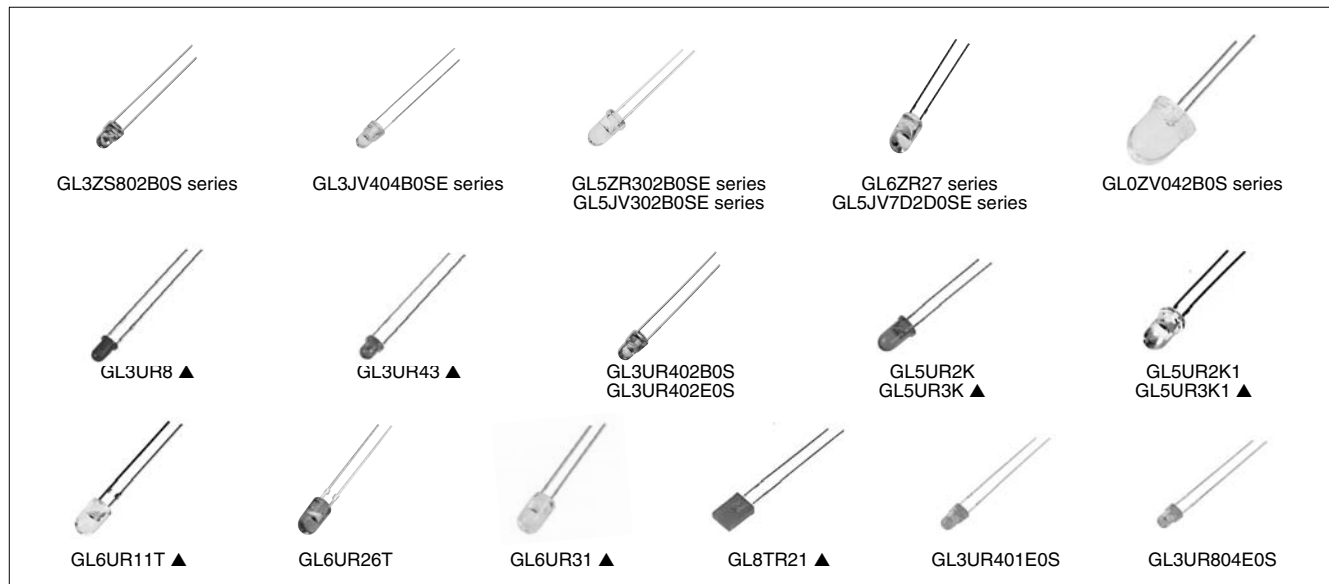
(If = 20 mA, Ta = 25°C)

Appearance	Radiation shape (mm)	Resin type				High-luminosity							
		Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion	BC (Blue)		GC (Green)		TR, T (Red)		UR, U (Red)	
						Model No.	Luminous intensity (mcd) TYP.	Model No.	Luminous intensity (mcd) TYP.	Model No.	Luminous intensity (mcd) TYP.	Model No.	Luminous intensity (mcd) TYP.
Cylinder	ø3	●								GL3TR8 ▲	60	GL3UR8 ▲	300
		●										☆GL3UR401E0S	250
				●						GLTR44 ▲	110	GL3UR44 ▲	250
				●								☆GL3UR402E0S	300
			●							GL3TR43 ▲	20	GL3UR43 ▲	100
			●									☆GL3UR804E0S	150
				●		GL3BC302B0S2	900					☆GL3UR404E0S	250
				●								GL3UR402B0S	350
	ø5			●		GL3B2402B0SC	650	GL3G2402B0SC	2 800				
		●								GL5TR8 ▲	80		
				●								GL5UR44	850
			●									GL5UR2K	2 000
			●									GL5UR3K ▲	3 000
				●						GL5TR43 ▲	500	GL5UR2K1	2 000
				●								GL5UR3K1 ▲	3 000
				●								GL6UR11T*1 ▲	300
				●								GL6UR31 ▲	950
				●								GL6UR26T*1	400
Oval	Long: 5.8 Short: 4.6		●										
Rectangle	2.5 × 5.0	●								GL8TR21 ▲	4	GL8UR21	16
	1.8 × 3.9	●								GL8TR42 ▲	4		

*1 With tie-bar

The model marked with ▲ may not be available in the near future. Contact with SHARP for details before use.

Taped model is also available.



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☆New product



■ LED Lamps (1)

(I_F = 20 mA*1, T_a = 25°C)

Appearance	Radiation shape (mm)	Resin type				K G		J G		E G		F G	
		Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion	(555 nm)	Luminous intensity (mcd) TYP.	(560 nm)	Luminous intensity (mcd) TYP.	(565 nm)	Luminous intensity (mcd) TYP.	(565 nm)	Luminous intensity (mcd) TYP.
Cylinder	ø3	●				GL3KG8 ▲	30			GL3EG8 ▲	60		
		●						☆GL3JG401E0S	80	☆GL3EG401E0S	80		
			●							GL3EG41 ▲	130		
				●		GL3KG44 ▲	60			GL3EG44 ▲	130		
				●				☆GL3JG402E0S	85	☆GL3EG402E0S	85		
		●				GL3KG43 ▲	20			GL3EG43 ▲	38		
		●						☆GL3JG804E0S	40	☆GL3EG804E0S	40		
		●				GL3KG62 ▲	22			GL3EG62 ▲	65		
		●						☆GL3JG404E0S	80	☆GL3EG404E0S	80		
		●				GL3KG63 ▲	6			GL3EG63 ▲	18		
	ø4	●								LT3E31W*2 ▲	18		
		●								LT3E65W*2 ▲	25		
		●				GL4KG8 ▲	30	☆GL4JG8	85	GL4EG8	100		
		●								GL5EG4 ▲	20		
		●				GL5KG8 ▲	60	☆GL5JG8	140	GL5EG8	150		
			●			GL5KG41 ▲	70	☆GL5JG41	160	GL5EG41	160		
				●		GL5KG44 ▲	70	☆GL5JG44	160	GL5EG44	160		
		●								GL5EG40	250		
				●		GL5KG43 ▲	120	☆GL5JG43	360	GL5EG43	300	GL5FG43 ▲	600
					●					GL5EG60 ▲	23		
Oval	Long: 5.8 Short: 4.6				●					GL6EG11T*3 ▲	120		
					●					GL5EG47 ▲	15		
					●					GL6EG26T*3	140		
					●								
					●								
					●								
					●								
					●								
					●								
					●								
Convex	2.5 × 5.0 2.0 × 3.1 1.8 × 3.9 1.9 × 3.9 2.0 × 3.2 2.0 × 3.2 2.0 × 4.5 2.0 × 5.0				●					GL2EG6 ▲	15		
					●					GL8EG2 ▲	30		
					●					GL8EG4 ▲	50		
					●	GL8KG42 ▲	1.5			GL8EG42 ▲	5		
					●					GL8EG5 ▲	28		
					●	GL8KG25 ▲	9			GL8EG25 ▲	12		
					●	GL8KG29 ▲	5			GL8EG29 ▲	12		
					●					GL8EG23	6		
					●	GL8KG21 ▲	4	☆GL8JG21	7	GL8EG21	8		
					●	GL8KG26 ▲	4			GL8EG26 ▲	8		
Rectangle	5.0 × 5.0				●	GL8KG22 ▲	3.5	☆GL8JG22	8	GL8EG22	6		
					●								
					●								
					●								
					●								
					●								
					●								
					●								
					●								
					●								
Square	Isosceles triangle				●								
					●								
					●								
					●								
					●								
					●								
					●								
					●								
					●								
					●								
Triangle	Isosceles triangle				●								
					●								
					●								
					●								
					●								
					●								
					●								
					●								
					●								
					●								

*1 PR series (Red): I_F = 5 mA (GL8PR25, GL8PR29: I_F = 10 mA)

*2 Taped model

*3 With tie-bar

HL: High-luminosity

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Taped model is also available.

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■ LED Lamps (2)

(I F = 20 mA*1, Ta = 25°C)

Appearance	Radiation shape (mm)	Resin type				HY Yellow		HS Sunset orange		HD Red		PR Red	
		Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion	(585 nm)	Luminous intensity (mcd) TYP.	(610 nm)	Luminous intensity (mcd) TYP.	(635 nm)	Luminous intensity (mcd) TYP.	(695 nm)	Luminous intensity (mcd) TYP.
Cylinder	ø3	●				GL3HY8 ▲	55	GL3HS8 ▲	60	GL3HD8 ▲	40	GL3PR8 ▲	8
		●				☆GL3HY401E0S	60	☆GL3HS401E0S	60	☆GL3HD401E0S	60		
			●										
				●		GL3HY44 ▲	100	GL3HS44 ▲	100	GL3HD44 ▲	110	GL3PR44 ▲	12
				●		☆GL3HY402E0S	70	☆GL3HS402E0S	70	☆GL3HD402E0S	70		
		●				GL3HY43 ▲	25	GL3HS43 ▲	25	GL3HD43 ▲	25	GL3PR43 ▲	3
		●				☆GL3HY804E0S	30	☆GL3HS804E0S	30	☆GL3HD804E0S	30		
		●				GL3HY62 ▲	40	GL3HS62 ▲	40	GL3HD62 ▲	50		
		●				☆GL3HY404E0S	60	☆GL3HS404E0S	60	☆GL3HD404E0S	60		
		●				GL3HY63 ▲	16	GL3HS63 ▲	15	GL3HD63 ▲	17	GL3PR63 ▲	2
	ø4	●				LT3H31W*2 ▲	15			LT3D31W*2 ▲	15	LT3P31W*2 ▲	1.5
		●				LT3H65W*2 ▲	25	LT3S65W*2 ▲	25	LT3D65W*2 ▲	25	LT3P65W*2 ▲	3
		●				GL4HY8	110	GL4HS8	80	GL4HD8	110	GL4PR8 ▲	15
		●								GL5HD4 ▲	25	GL5PR4 ▲	3
		●				GL5HY8	120	GL5HS8	80	GL5HD8	80	GL5PR8 ▲	15
			●			GL5HY41	100	GL5HS41	100	GL5HD41	150	GL5PR41 ▲	15
				●		GL5HY44	100	GL5HS44	100	GL5HD44	100	GL5PR44 ▲	15
			●			GL5HY40	250	GL5HS40	200	GL5HD40	250	GL5PR40 ▲	35
				●		GL5HY43	250	GL5HS43	250	GL5HD43	300		
					●					GL5HD60 ▲	8		
Oval	Long: 5.8 Short: 4.6	●											
		●											
Convex	ø2	●				GL2HY6 ▲	12			GL2HD6 ▲	12	GL2PR6 ▲	1.5
Arch	2.5 × 5.0	●								GL8HD2 ▲	30		
	2.0 × 3.1	●								GL8HD4 ▲	40		
Rectangle	1.8 × 3.9	●				GL8HY42 ▲	6			GL8HD42 ▲	5	GL8PR42 ▲	0.7
	1.9 × 3.9	●				GL8HY5 ▲	25			GL8HD5 ▲	22		
	2.0 × 3.2	●				GL8HY25 ▲	12	GL8HS25 ▲	10	GL8HD25 ▲	12	GL8PR25 ▲	1.5
	2.0 × 3.2	●				GL8HY29 ▲	10	GL8HS29 ▲	7			GL8PR29 ▲	3
	2.0 × 4.5	●				GL8HY23	8			GL8HD23	6		
	2.0 × 5.0	●				GL8HY21	8	GL8HS21	8	GL8HD21	8	GL8PR21 ▲	0.7
		●				GL8HY26 ▲	8			GL8HD26 ▲	8	GL8PR26 ▲	0.7
Square	5.0 × 5.0	●				GL8HY22	5	GL8HS22	5	GL8HD22	8	GL8PR22 ▲	1.2
Triangle	Isosceles triangle	●										GL8PR28 ▲	0.9

*1 PR series (Red): I F = 5 mA (GL8PR25, GL8PR29: I F = 10 mA)

*2 Taped model

Taped model is also available.

The model marked with ▲ may not be available in the near future. Contact with SHARP for details before use.

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Cylinder



GL3EG401E0S series



GL3EG402E0S series



GL3EG404E0S series



GL3EG804E0S series



GL3PR8 series ▲



GL3PR44 series ▲



GL3HY43 series ▲



GL3KG62 series ▲



LT3E31W series ▲



GL3PR63 series ▲



LT3E65W series ▲



GL4EG8 series



GL5PR4 series ▲



GL5HS8 series



GL5EG41 series



GL5EG44 series



GL5EG40 series



GL5HY43 series



GL5EG60 series ▲



GL6EG11T ▲



GL5HD47 series ▲

Oval



GL6EG26T

Convex



GL2HY6 ▲

Arch



GL8EG2 series ▲



GL8HD4 series ▲

Rectangle



GL8KG42 series ▲



GL8KG25 series ▲



GL8HY29 series ▲



GL8HD23 series



GL8HS21 series



GL8HY26 series ▲

Square



GL8HD22 series

Triangle



GL8PR28 ▲

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■ Dichromatic LED Lamps

(The values in luminous intensity are radiation color order) (I_F = 20 mA*1, T_a = 25°C)

Appearance	Radiation shape (mm)	Resin type				E J J		C U *		E P		E D		E H		H P	
		Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion	Yellow-green + Orange (HL)	Luminous intensity (mcd) TYP.	Yellow-green + Red (HL)	Luminous intensity (mcd) TYP.	Yellow-green + Red	Luminous intensity (mcd) TYP.	Yellow-green + Red	Luminous intensity (mcd) TYP.	Yellow-green + Yellow	Luminous intensity (mcd) TYP.	Yellow + Red	Luminous intensity (mcd) TYP.
Cylinder	ø3				●							GL3ED8	20/15				
	ø5					GL5EJJ502C0X*2	110/170			GL5EP5 ▲	40/9	GL5ED5	40/25			GL5HP5 ▲	15/9
								GL5CU44 ▲	100/240			GL5ED44	80/50				
								GL6CU7 ▲	120/250			GL5ED60 ▲	11/8				
Rectangle	1.9 × 3.9											GL8ED5 ▲	10/6.5			GL8HP5 ▲	3/1.5
	2.0 × 5.0											GL9ED2	8/3	GL9EH2 ▲	6/2	GL9HP2 ▲	1/0.8
	5.0 × 5.0											GL9ED4	7/4				

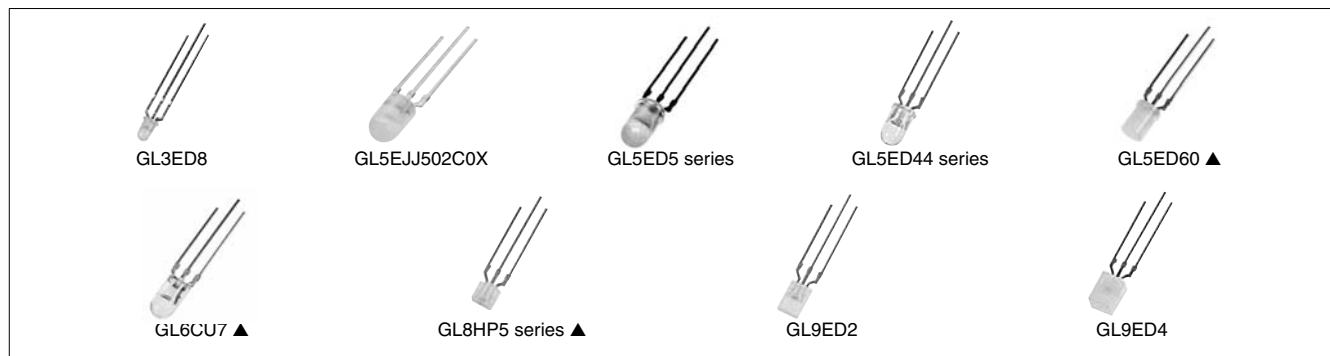
* CU series: Common anode pin connection

*1 P (Red) and H (yellow): I_F = 10 mA

*2 Taped model

HL: High-luminosity

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■ High-Luminosity (AlGaInP) Chip LEDs (Taped Models Only)

(I_F = 20 mA, T_a = 25°C^{*3})

Outline dimensions (mm)	Resin type			J G	Luminous intensity (mcd) TYP.	J E S E	Luminous intensity (mcd) TYP.	Z V J V	Luminous intensity (mcd) TYP.	Z S J S	Sunset orange	Luminous intensity (mcd) TYP.	Z J J J S J	Orange	Luminous intensity (mcd) TYP.	Z R J R	Red	Luminous intensity (mcd) TYP.
	Colored diffusion	Colored transparency	Colorless transparency															
1.6 × 0.8 (T: 0.35)			●			GM1JE35200AE*1	13	GM1JV35200AE*1	18.8	GM1JS35200AE*1	19	GM1JJ35200AE*1	19	GM1JR35200AE*1	13			
1.6 × 0.8 (T: 0.55)			●			GM1JE55200AE*1	13	GM1JV55200AE*1	16.8	GM1JS55200AE*1	20.9	GM1JJ55200AE*1	19					
1.6 × 0.8 (T: 0.8)			●					GM1ZV80300AE	75	GM1ZS80300AE	75	GM1ZJ80300AE	75	GM1ZR80300AE	55			
			●	☆GM1JG80300AE	15	☆GM1JE80300AE		LT1JV67A*1	16.5	LT1JS67A*1	14.1			☆LT1JR67A	10			
2.0 × 1.25 (T: 0.8)			●					GM1ZV40300AE	60	GM1ZS40300AE	78	GM1ZJ40300AE	60	GM1ZR40300AE	55			
			●	☆LT1JG40A	15			GM1JV40300AE	11	GM1JS40300AE	12	GM1JJ40300AE	9.5	☆LT1JR40A	9			
3.2 × 2.8 (T: 1.9)			●					☆GM5ZV96270A	600					☆GM5ZR96270A	600			
			●					GM5ZV96260AE	320					GM5ZR96260AE	300			
6.0 × 5.0 (T: 2.5)			●					GM5ZV01200A*2	500	GM5ZS01200A*2	700	GM5ZJ01200A*2	500	GM5ZR01200A*2	400			
			●			GM5SE01200A*2	400					GM5SJ01250AL*2	1 050					
6.0 × 5.0 (T: 2.3) (board insertion type)			●					GM5ZV03200Z*2	500	GM5ZS03200Z*2	700	GM5ZJ03200Z*2	500	GM5ZR03200Z*2	400			
2.8 × 1.2 (T: 0.8) (Side emitting)			●					☆GM4ZV83200AE	(100)	☆GM4ZS83200AE	(150)	☆GM4ZJ83200AE	(150)	GM4ZR83200AE	(90)			
5.0 × 5.0 (T: 1.5)			●												GM5ZR05240A	3 000		

*1 LT1JS67A, LT1JV67A, GM1JV55200AE series, GM1JV35200AE series, GM1JV40300AE series: I_F = 5 mA*2 GM5ZR01200A series, GM5ZR03200Z series: I_F = 60 mA*3 GM5ZV96260AE series, GM5ZV96270A series, GM5ZV01200A series, GM5ZV03200Z series: T_c = 25°C

■ High-Luminosity (InGaN) Chip LEDs (Taped Models Only)

(I_F = 10 mA, T_a = 25°C^{*5})

Outline dimensions (mm)	Resin type				BC Blue		GC Green	
	Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion		Luminous intensity (mcd) TYP.		Luminous intensity (mcd) TYP.
1.6 × 0.8 (T: 0.35)				●	GM1BC35370AC*1	23		
1.6 × 0.8 (T: 0.55)			●		GM1BC55255AC*1	23	GM1GC55310AC*4	100
3.2 × 2.8 (T: 1.9)			●		☆GM5BC96270A*2	500	☆GM5GC96270A	1 300
			●		GM5BC96260AC*2	300	GM5GC96260AC*2	700
6.0 × 5.0 (T: 2.5)			●		GM5BC01250AC*3	400	GM5GC01250AC*3	1 200
6.0 × 5.0 (T: 2.3) board insertion type			●		GM5BC03210Z*3	400	GM5GC03210Z*3	1 200
2.8 × 1.2 (T: 0.8) Side emitting			●		☆GM4BC83211AC*2	(120)		
5.0 × 5.0 (T: 1.5)			●		GM5BC05240AC*2	2 000	GM5GC05240AC*2	4 000

*1 GM1BC35370AC, GM1BC55255AC: I_F = 5 mA*2 GM5BC96260AC series, GM5BC96270A series, GM4BC83211AC, GM5BC05240AC series: I_F = 20 mA*3 GM5BC01250AC series, GM5BC03210Z series: I_F = 50 mA*4 GM1GC55310AC: I_F = 10 mA*5 GM5BC96260AC series, GM5BC96270A series, GM5BC01250AC series, GM5BC03210Z series: T_c = 25°C

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■ Chip LEDs (Taped Models Only)

(If = 20 mA*, Ta = 25°C)

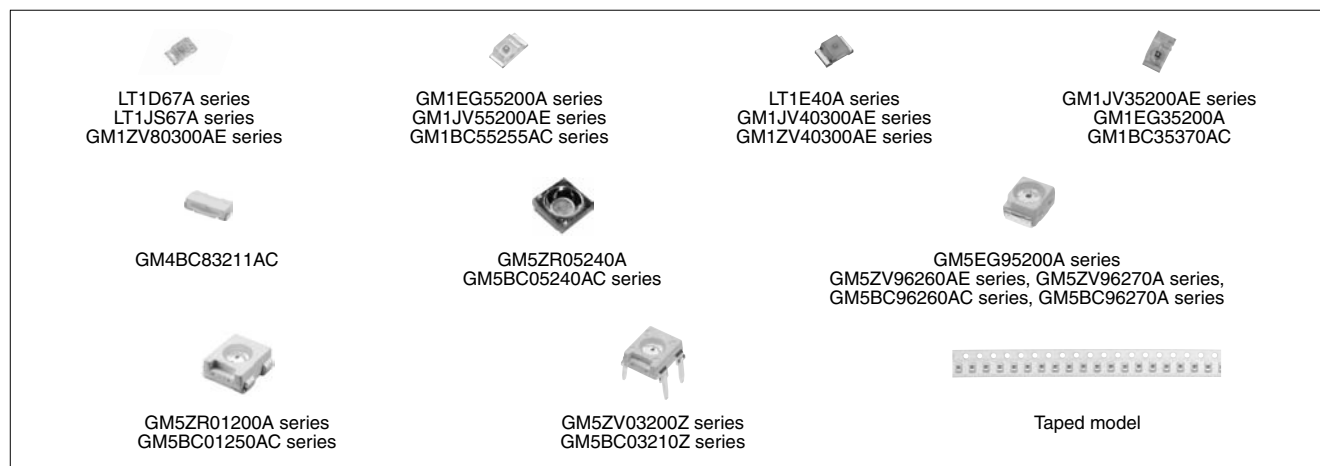
Outline dimensions (mm)	Resin type				K	Luminous intensity (mcd) TYP.	E F E G		Luminous intensity (mcd) TYP.	H H Y		Luminous intensity (mcd) TYP.
	Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion			Yellow-green			Yellow		
1.6 × 0.8 (T: 0.35)			●				GM1EG35200A	19				
1.6 × 0.8 (T: 0.55)			●				GM1EG55200A	19		GM1HY55200A		11.5
1.6 × 0.8 (T: 0.8)				●	LT1K67A ▲	3.8	LT1E67A LT1F67A LT1F67AF	23		LT1H67A		8.3
2.0 × 1.25 (T: 0.8)				●	LT1K40A ▲	5	LT1E40A	19		LT1H40A		10.8
3.2 × 2.8 (T: 1.9)			●				GM5EG95200A	18.1				

Outline dimensions (mm)	Resin type				S H S		D H D		U U R		P	
	Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion	Sunset orange	Luminous intensity (mcd) TYP.	Red	Luminous intensity (mcd) TYP.	Red (HL)	Luminous intensity (mcd) TYP.	Red	Luminous intensity (mcd) TYP.
1.6 × 0.8 (T: 0.55)			●		GM1HS55200A	11.4	GM1HD55200A	12.5	GM1UR55200A	29.7		
1.6 × 0.8 (T: 0.8)			●		LT1S67A	6.9	LT1D67A	8.8	LT1U67A	29.7	LT1P67A ▲	1.3
2.0 × 1.25 (T: 0.8)			●		LT1S40A	9.4	LT1D40A	11.9	LT1U40A	35.6	LT1P40A ▲	1.3
3.2 × 2.8 (T: 1.9)			●				GM5HD95200A	13.8	GM5UR95200A	80		

*1 P (Red) series: If = 5 mA

The model marked with ▲ may not be available in the near future. Contact with SHARP for details before use.

HL: High-luminosity



■ High-Luminosity Dichromatic Type Chip LEDs (Taped Models Only)

(If = 40 mA, Tc = 25°C)

Outline dimensions (mm)	Resin type				BCGC Blue + Green	BCZR Blue + Red	GCZR Green + Red
	Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion			
6.0 × 5.0 (T: 2.5)			●		GM5BG01210A300/860	GM5ZRB01210A300/580	GM5ZRG01210A860/580

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☆New product
★Under development



■ Dichromatic Type Chip LEDs (Taped Models Only)

(I_F = 20 mA, T_a = 25°C)

Outline dimensions (mm)	Resin type					EH		ED		KS	
	Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion		Yellow-green + Yellow	Luminous intensity (mcd) TYP.	Yellow-green + Red	Luminous intensity (mcd) TYP.	Green + Sunset orange	Luminous intensity (mcd) TYP.
1.6 × 1.6 (T: 0.8)				●		LT1EH67A	19/8.3	LT1ED67A	19/8.3	LT1KS67A ▲	3.8/6.9

The model marked with ▲ may not be available in the near future. Contact with SHARP for details before use.



GM5BG01210A series



LT1ED67A series

■ High-Luminosity White Type Chip LEDs (Taped Models Only)

(T_a = 25°C*5)

Outline dimensions (mm)	Color coordinates (x, y)	Radiation color	BW	
			White	Luminous intensity (mcd) TYP.
2.8 × 1.2 (T: 0.8) Side view type	(0.30, 0.29)	White	☆GM4BW84310A*1	1 550
			☆GM4BW84320A*1	1 850
			☆GM4BW84330A*1	2 050
3.85 × 1.0 (T: 0.6) Side view type	(0.30, 0.29)	White	☆GM4BW64310A*1	1 500
			☆GM4BW64320A*1	1 800
			☆GM4BW64330A*1	2 000
3.85 × 1.0 (T: 0.5) Side view type	(0.30, 0.29)	White	☆GM4BW53340A*1	1 800
2.04 × 1.64 (T: 0.7)	(0.31, 0.31)	White	★GM1BW70301A*4	11 000
3.2 × 2.8 (T: 1.9)	(0.31, 0.31)	White	GM5BW96320A*1	1 400
			☆GM5BW96370A*1	2 000
3.2 × 2.8 (T: 1.4)	(0.31, 0.31)	White	GM5BW94320A*1	3 800
5.0 × 5.0 (T: 1.5)	(0.31, 0.31)	White	GM5BW05340A*1	10 000
5.0 × 5.0 (T: 1.6)	(0.31, 0.31)	White	☆GM5BW05343A*2	20 000
6.0 × 5.0 (T: 1.5) 6-terminal leadless	(0.31, 0.31)	White	GM5BW01300A*2	4 200
6.0 × 5.0 (T: 2.5) 4-terminal leadless	(0.31, 0.31)	White	GM5BW01301A*3	1 800
			☆GM5BW01311A*3	3 300

*1 GM4BW84310A series, GM4BW64310A series, GM4BW53340A, GM5BW96320A, GM5BW96370A, GM5BW94320A, GM5BW05340A: I_F = 20 mA

*2 GM5BW05343A, GM5BW01300A: I_F = 35 mA/chip

*3 GM5BW01301A series: I_F = 40 mA

*4 GM1BW70301A series: I_F = 200 mA

*5 GM5BW96320A, GM5BW96370A, GM5BW01300A, GM5BW01301A series: T_c = 25°C

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☆New product
★Under development



■ Pastel Color Chip LEDs (Taped Models Only)

(I_F = 20 mA, T_c = 25°C)

Outline dimensions (mm)	CA			CY			CV		
	Light blue			Lemon yellow			Purple		
		Color coordinates (x, y)	Luminous intensity (mcd) TYP.		Color coordinates (x, y)	Luminous intensity (mcd) TYP.		Color coordinates (x, y)	Luminous intensity (mcd) TYP.
3.2 × 2.8 (T: 0.9)	☆GM5CA96320A	(0.17, 0.20)	1 000	★GM5CY96320A	(0.42, 0.48)	1 500	★GM5CV96320A	(0.35, 0.15)	500

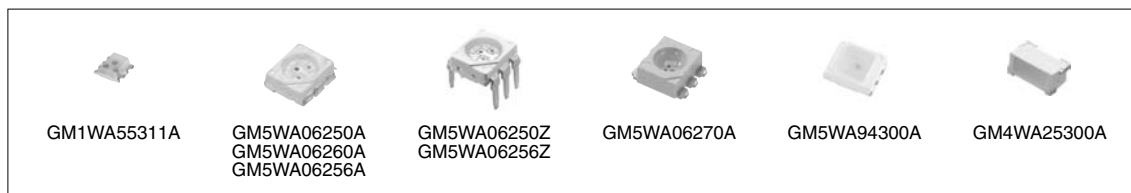


■ High-Luminosity Dichromatic Type Chip LEDs (RGB 3-color) (Taped Models Only)

(T_a = 25°C*9)

Outline dimensions (mm)	Resin type				WA	Luminous intensity (mcd) TYP.
	Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion		
1.6 × 1.6 (T: 0.55)				●	GM1WA55311A*5	20/70/23
3.2 × 2.8 (T: 1.4)			●		★GM5WA94300A*7	(1 800) [Mixed color]
5.0 × 2.5 (T: 2.5)			●		★GM4WA25300A*8	(2 200) [Mixed color]
6.0 × 5.0 (T: 2.5) 6-terminal leadless			●		GM5WA06250A*2	1 400 [Mixed color]
			●		GM5WA06260A*1	1 725 [Mixed color]
			●		GM5WA06256A*6	1 500 [Mixed color]
			●		GM5WA06270A*3, 4	3 000 [Mixed color]
6.0 × 5.0 (T: 2.3 [resin part]) 6-terminal			●		GM5WA06250Z*2	1 400 [Mixed color]
			●		GM5WA06256Z*6	1 500 [Mixed color]

- *1 GM5WA06260A: I_F = 40 mA (Red, Green), I_F = 20 mA (Blue)
 *2 GM5WA06250A, GM5WA06250Z: I_F = 35 mA (Red, Green), I_F = 20 mA (Blue)
 *3 GM5WA06270A: I_F = 35 mA (Red, Green, Blue)
 *4 GM5WA06270A: T: 2.4 mm
 *5 GM1WA55311A: I_F = 5 mA (Red, Green, Blue)
 *6 GM5WA06256A: I_F = 22 mA (Red), I_F = 35 mA (Green), I_F = 13 mA (Blue)
 *7 GM5WA94300A: I_F = 20 mA (Red), I_F = 20 mA (Green), I_F = 7 mA (Blue)
 *8 GM4WA25300A: I_F = 21 mA (Red), I_F = 25 mA (Green), I_F = 7 mA (Blue)
 *9 GM1WA55311A, GM5WA94300A, GM4WA25300A, GM5WA06250A series: T_c = 25°C



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■ Laser Diodes

◆ Model Configurations

Wavelength (nm)	Optical power output (Pulse) (mW) MAX.	Package			
		 ø5.6 mm Metal type	 ø3.3 mm Metal type	 1.8 mm t Resin type	 ø5.6 mm Resin type
405 band	20*1	☆GH04020A2G			
	210	☆GH04P21A2G			
650 band	240	GH06P24A2C		GH16P24A8C	
	350			☆GH16P35A8C	
780 band	5*1	GH07805C2K			GH17805B2AS
	25*1	GH07825C2K			
	240	GH07P24C1C	GH07P24C4C	GH17P24C8C	
	280	GH07P28A1C	GH07P28A4C	☆GH17P28A8C	

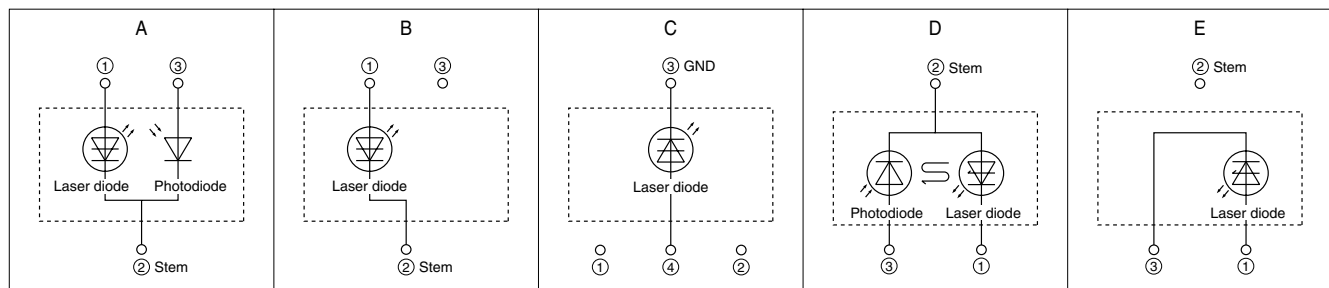
*1 Optical power output (CW) MAX. (mW)

◆ Specifications

(Tc = 25°C)

Model No.	Wave-length (nm)	Optical power output (mW) MAX.		Features	Applications	Terminal connections
		CW	Pulse			
☆GH04020A2G	405 band	20	—	ø5.6 mm CAN package, operating temperature: 70°C MAX.	Next generation DVD playback	E
☆GH04P21A2G		105	210	ø5.6 mm CAN package, operating temperature: 70°C MAX.	Next generation DVD recording	
GH06P24A2C	650 band	100	240	ø5.6 mm CAN package, operating temperature: 75°C MAX. (pulse drive)	Double-layer DVD x4 writing	B
GH16P24A8C		100	240	1.8 mm frame package, operating temperature: 75°C MAX. (pulse drive)	Double-layer DVD x4 writing	C
GH16P35A8C		125	350	1.8 mm frame package, operating temperature: 75°C MAX. (pulse drive)	Double-layer DVD x16 writing	
GH17805B2AS	780 band	5	—	ø5.6 mm frame package, operating temperature: 70°C MAX., with built-in monitor PD	CD-ROM, CD-Audio	A
GH07805C2K		5	—	ø5.6 mm CAN package, operating temperature: 60°C MAX., with built-in monitor PD	Printer, copier, complex machine	D
GH07825C2K		25	—	ø5.6 mm CAN package, operating temperature: 60°C MAX., with built-in monitor PD	Printer, copier, complex machine	
GH07P24C1C		120	240	ø5.6 mm CAN package, operating temperature: 75°C MAX. (pulse drive)	CD-R/RW (MAX. x48 to x52 writing)	B
GH07P28A1C		150	280	ø5.6 mm CAN package, operating temperature: 75°C MAX. (pulse drive)	CD-R/RW (MAX. x48 to x52 writing)	
GH07P24C4C		120	240	ø3.3 mm CAN package, operating temperature: 75°C MAX. (pulse drive)	CD-R/RW (H/H, slim dual-purpose) (MAX. x48 to x52 writing)	
GH07P28A4C		150	280	ø3.3 mm CAN package, operating temperature: 75°C MAX. (pulse drive)	CD-R/RW (H/H, slim dual-purpose) (MAX. x48 to x52 writing)	
GH17P24C8C		120	240	1.8 mm frame package, operating temperature: 75°C MAX. (pulse drive)	CD-R/RW (H/H, slim dual-purpose) (MAX. x48 to x52 writing)	C
GH17P28A8C		150	280	1.8 mm frame package, operating temperature: 75°C MAX. (pulse drive)	CD-R/RW (H/H, slim dual-purpose) (MAX. x48 to x52 writing)	

• Terminal Connections



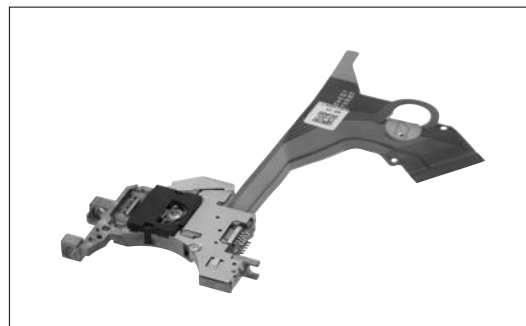
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■ Slim Combo Drive Pickup <DD-56>

◆ Features

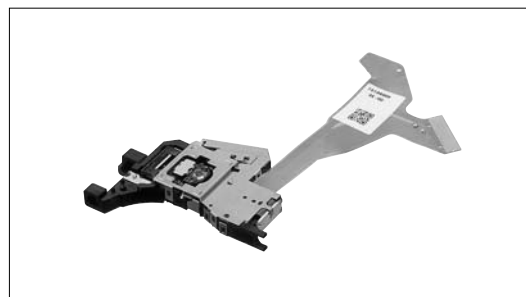
- Thin type pickup compatible with half-inch-height drive (12.7 mm thickness)
- Playback speed: $\times 8$ (DVD-ROM), $\times 24$ (CD-ROM)
- Recording speed: $\times 24$ (CD-R), $\times 24$ (CD-RW)
- DVD-RAM readable
- Outline dimensions: W 38.6 $\times$ H 7.3 $\times$ D 48.7 (mm)
- Weight: Approx. 15 g



■ Slim DVD-ROM Drive Pickup <DD-30>

◆ Features

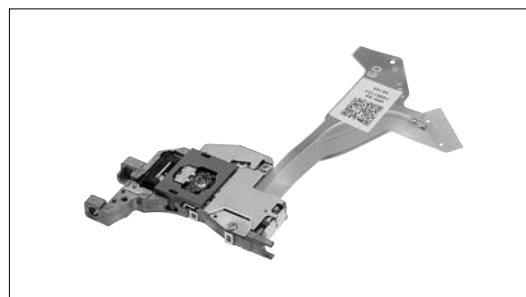
- Thin type pickup compatible with half-inch-height drive (12.7 mm thickness)
- Playable disk: DVD-ROM/RAM, CD-ROM
- Playback speed: $\times 8$ (DVD-ROM), $\times 24$ (CD-ROM)
- Outline dimensions: W 38.7 $\times$ H 7.3 $\times$ D 48.7 (mm)
- Weight: Approx. 8 g



■ DVD Pickup for Automotive Use <HPD-66>

◆ Features

- Compact, thin (7.3 mm) pickup
- Playable disk: DVD-ROM, CD-ROM
- Operating temperature: -30 to $+85^{\circ}\text{C}$
- Outline dimensions: W 30.2 $\times$ H 7.3 $\times$ D 48.7 (mm)



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