■ 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)	(564)	(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 (High-luminosity)	Red (High-luminosity)	Red
Series	KG, K	EG, E, C*	FG, F	HY, H	HS, S	HD, D	TR, T	UR, U	PR, P
Peak emission wavelength (nm)	555	565	565	585	610	635	660	660	695
Radiation material	GaP	GaP	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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☆New product

■ High-Luminosity LED Lamps

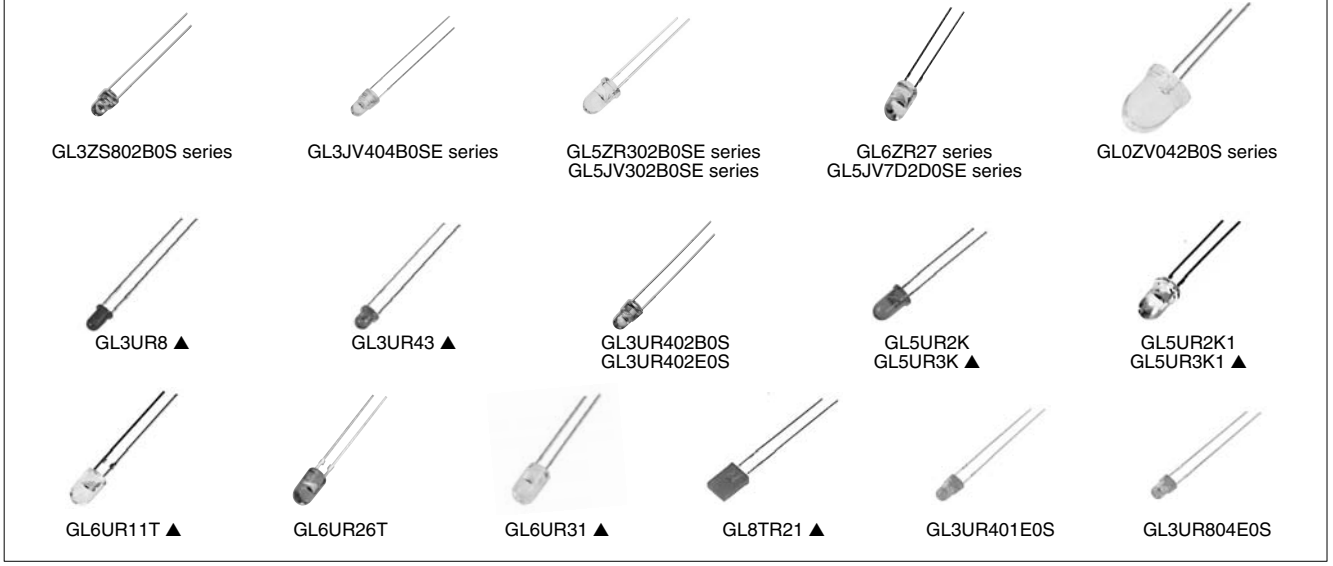
(I_F = 20 mA, Ta = 25°C)

Appearance	Radiation shape (mm)	Resin type				High-luminosity							
						BC (Blue)		GC (Green)		TR, T (Red)		UR, U (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.
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
				●		GL3B2402B0SC	650	GL3G2402B0SC	2 800				
	ø5	●								GL5TR8 ▲	80		
				●								GL5UR44	850
			●									GL5UR2K	2 000
			●									GL5UR3K ▲	3 000
				●						GL5TR43 ▲	500	GL5UR2K1	2 000
				●								GL5UR3K1 ▲	3 000
				●								GL6UR11T*1 ▲	300
				●								GL6UR31 ▲	950
Oval	Long: 5.8 Short: 4.6		●									GL6UR26T*1	400
Rectangle	2.5 × 5.0	●								GL8TR21 ▲	4	GL8UR21	16
	1.8 × 3.9	●								GL8TR42 ▲	4		

*1 With tie-bar

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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☆New product

■ LED Lamps (1)

(I_F = 20 mA*1, Ta = 25°C)

Appearance	Radiation shape (mm)	Resin type: Colored diffusion	Resin type: Colored transparency	Resin type: Colorless transparency	Resin type: Milky diffusion	KG Green (555 nm)	Luminous intensity (mcd) TYP.	JG Green (564 nm)	Luminous intensity (mcd) TYP.	EG Yellow-green (565 nm)	Luminous intensity (mcd) TYP.	FG Yellow-green (HL) (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		
		●								LT3E31W*2 ▲	18		
			●							LT3E65W*2 ▲	25		
	ø4	●				GL4KG8 ▲	30	☆GL4JG8	85	GL4EG8	100		
	ø5	●								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		
				●						GL6EG11T*3 ▲	120		
	ø5 (Inverted cone)		●							GL5EG47 ▲	15		
Oval	Long: 5.8 Short: 4.6		●							GL6EG26T*3	140		
Convex	ø2	●								GL2EG6 ▲	15		
Arch	2.5 × 5.0	●								GL8EG2 ▲	30		
	2.0 × 3.1		●							GL8EG4 ▲	50		
Rectangle	1.8 × 3.9	●				GL8KG42 ▲	1.5			GL8EG42 ▲	5		
	1.9 × 3.9		●							GL8EG5 ▲	28		
	2.0 × 3.2		●			GL8KG25 ▲	9			GL8EG25 ▲	12		
	2.0 × 3.2	●				GL8KG29 ▲	5			GL8EG29 ▲	12		
	2.0 × 4.5	●								GL8EG23	6		
	2.0 × 5.0	●				GL8KG21 ▲	4	☆GL8JG21	7	GL8EG21	8		
		●				GL8KG26 ▲	4			GL8EG26 ▲	8		
Square	5.0 × 5.0	●				GL8KG22 ▲	3.5	☆GL8JG22	8	GL8EG22	6		
Triangle	Isosceles triangle	●											

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

Taped model is also available.

*2 Taped model

*3 With tie-bar

HL: High-luminosity

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

☆New product

■ LED Lamps (2)

(I_F = 20 mA*1, Ta = 25°C)

Appearance	Radiation shape (mm)	Resin type: Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion	HY Yellow (585 nm)	Luminous intensity (mcd) TYP.	HS Sunset orange (610 nm)	Luminous intensity (mcd) TYP.	HD Red (635 nm)	Luminous intensity (mcd) TYP.	PR Red (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
		●				LT3H31W*2 ▲	15			LT3D31W*2 ▲	15	LT3P31W*2 ▲	1.5
			●			LT3H65W*2 ▲	25	LT3S65W*2 ▲	25	LT3D65W*2 ▲	25	LT3P65W*2 ▲	3
	ø4	●				GL4HY8	110	GL4HS8	80	GL4HD8	110	GL4PR8 ▲	15
	ø5	●								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		
				●									
	ø5 (Inverted cone)		●					GL5HS47 ▲	6	GL5HD47 ▲	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)

Taped model is also available.

*2 Taped model

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

LED LAMPS

RoHS Pb FREE

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

Convex

Arch


GL6EG26T


GL2HY6 ▲


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, Ta = 25°C)

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

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

GL3ED8

GL5EJJ502C0X

GL5ED5 series

GL5ED44 series

GL5ED60 ▲

GL6CU7 ▲

GL8HP5 series ▲

GL9ED2

GL9ED4

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☆New product

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

(I_F = 20 mA, Ta = 25°C*3)

Outline dimensions (mm)	Resin type: Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion	JG Green	JG Luminous intensity (mcd) TYP.	JES Yellow-green	JES Luminous intensity (mcd) TYP.	ZVJV Amber	ZVJV Luminous intensity (mcd) TYP.	ZSJS Sunset orange	ZSJS Luminous intensity (mcd) TYP.	ZJJJSJ Orange	ZJJJSJ Luminous intensity (mcd) TYP.	ZRJR Red	ZRJR Luminous intensity (mcd) TYP.
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	(15)	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)			●												☆GM4ZR83200AE	(120)

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

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

(I_F = 10 mA, Ta = 25°C*5)

Outline dimensions (mm)	Resin type: Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion	BC Blue	BC Luminous intensity (mcd) TYP.	GC Green	GC 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)		

*1 GM1BC35370AC, GM1BC55255AC: I_F = 5 mA
*2 GM5BC96260AC series, GM5BC96270A series, GM4BC83211AC: 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: Tc= 25°C

■ Chip LEDs (Taped Models Only)

(I_F = 20 mA*1, Ta = 25°C)

Outline dimensions (mm)	Resin type: Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion	K Green	Luminous intensity (mcd) TYP.	EFEG Yellow-green	Luminous intensity (mcd) TYP.	HHY Yellow	Luminous intensity (mcd) TYP.
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

Outline dimensions (mm)	Resin type: Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion	SHS Sunset orange	Luminous intensity (mcd) TYP.	DHD Red	Luminous intensity (mcd) TYP.	UUR Red (HL)	Luminous intensity (mcd) TYP.	P 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

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

HL: High-luminosity

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

LT1D67A series
LT1JS67A series
GM1ZV80300AE series

GM1EG55200A series
GM1JV55200AE series
GM1BC55255AC series

LT1E40A series
GM1JV40300AE series
GM1ZV40300AE series

GM1JV35200AE series
GM1EG35200A
GM1BC35370AC

GM4BC83211AC series

GM5ZV96260AE series,
GM5ZV96270A series,
GM5BC96260AC series,
GM5BC96270A series

GM5ZR01200A series
GM5BC01250AC series

GM5ZV03200Z series
GM5BC03210Z series

Taped model

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

(I_F = 40 mA, Tc = 25°C)

Outline dimensions (mm)	Resin type: Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion	BC GC Blue + Green	Luminous intensity (mcd) TYP.	BC ZR Blue + Red	Luminous intensity (mcd) TYP.	GC ZR Green + Red	Luminous intensity (mcd) TYP.
6.0 × 5.0 (T: 2.5)			●		GM5BG01210A	300/860	GM5ZRB01210A	300/580	GM5ZRG01210A	860/580

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DICHROMATIC TYPE CHIP LEDs / HIGH-LUMINOSITY WHITE CHIP LEDs

☆New product
★Under development

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■ Dichromatic Type Chip LEDs (Taped Models Only)

(I_F = 20 mA, Ta = 25°C)

Outline dimensions (mm)	Resin type				EH Yellow-green + Yellow		ED Yellow-green + Red		KS Green + Sunset orange	
	Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion		Luminous intensity (mcd) TYP.		Luminous intensity (mcd) TYP.		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 Chip LEDs (Taped Models Only)

(Ta = 25°C*5)

Outline dimensions (mm)	Color coordinates (x, y)	Radiation color	BW White	
				Luminous intensity (mcd) TYP.
1.6 × 0.8 (T: 0.2)	(0.27, 0.23)	White	☆GM1BW20300A*1	50
2.8 × 1.2 (T: 0.8) Side view type	(0.30, 0.29)	White	GM4BW84310A*1	1 550
			☆GM4BW853A0A*1	1 900
			☆GM4BW853B0A*1	2 200
3.85 × 1.0 (T: 0.6) Side view type	(0.30, 0.29)	White	GM4BW64310A*1	1 500
			☆GM4BW653A0A*1	1 900
			☆GM4BW653B0A*1	2 200
3.85 × 1.0 (T: 0.5) Side view type	(0.30, 0.29)	White	GM4BW53340A*1	1 800
2.64 × 1.64 (T: 0.7)	(0.31, 0.31)	White	★GM1BW78140A*4	(9 000)
3.2 × 2.8 (T: 1.9)	(0.31, 0.31)	White	★GM5BW96381A*1	(2 250)
	(0.34, 0.36)	White	★GM5BW96380A*1	(2 450)
3.2 × 2.8 (T: 1.4)	(0.31, 0.31)	White	GM5BW94320A*6	3 800
			★GM5BW94370A*6	(5 200)
5.0 × 5.0 (T: 1.5)	(0.31, 0.31)	White	GM5BW05340A*1	10 000
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 GM1BW20300A, GM4BW84310A series, GM4BW64310A series, GM4BW53340A, GM5BW96380A series, GM5BW05340A: I_F = 20 mA
*2 GM5BW01300A: I_F = 35 mA/chip
*3 GM5BW01301A series: I_F = 40 mA
*4 GM1BW78140A series: I_F = 150 mA
*5 GM5BW96380A series, GM5BW01300A, GM5BW01301A series: Tc = 25°C
*6 GM5BW94320A, GM5BW94370A: I_F = 25 mA

PASTEL COLOR CHIP LEDs / HIGH-LUMINOSITY DICHROMATIC TYPE CHIP LEDs

☆New product
★Under development

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■ Pastel Color Chip LEDs (Taped Models Only)

(I_F = 20 mA, Tc = 25°C)

Outline dimensions (mm)	CA Light blue			CY Lemon yellow			CV 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: 1.9)	GM5CA96320A	(0.17, 0.20)	1 000	☆GM5CY96320A	(0.42, 0.48)	1 500	☆GM5CV96320A	(0.35, 0.15)	500


GM1BW20300A


GM1BW78140A


GM5BW96380A series
GM5CA96320A series


GM5BW01300A


GM5BW01301A
GM5BW01311A


GM4BW84310A series


GM4BW53340A


GM5BW05340A


GM4BW64310A series

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

(Ta = 25°C*9)

Outline dimensions (mm)	Resin type: Colored diffusion	Colored transparency	Colorless transparency	Milky diffusion	WA Red + Green + Blue	Luminous intensity (mcd) TYP.
1.6 × 1.6 (T: 0.55)				●	GM1WA55311A*4	20/70/23
3.2 × 2.8 (T: 1.4)				●	☆GM5WA94300A*6	1 800 [Mixed color]
5.0 × 2.5 (T: 2.5)				●	★GM4WA25300A*7	(2 200) [Mixed color]
6.0 × 5.0 (T: 2.5) 6-terminal leadless			●		GM5WA06256A*5	1 500 [Mixed color]
				●	★GM5WA06310A*1	(3 500) [Mixed color]
6.0 × 5.0 (T: 2.4) 6-terminal leadless			●		GM5WA06270A*2, 3	3 000 [Mixed color]
6.0 × 5.0 (T: 2.3 [resin part]) 6-terminal lead type			●		GM5WA06256Z*5	1 500 [Mixed color]

*1 GM5WA06310A: I_F = 35 mA (Red), I_F = 40 mA (Green), I_F = 10 mA (Blue)
*2 GM5WA06270A: I_F = 35 mA (Red, Green, Blue)
*3 GM5WA06270A: T: 2.4 mm
*4 GM1WA55311A: I_F = 5 mA (Red, Green, Blue)
*5 GM5WA06256A: I_F = 22 mA (Red), I_F = 35 mA (Green), I_F = 13 mA (Blue)
*6 GM5WA94300A: I_F = 20 mA (Red), I_F = 20 mA (Green), I_F = 7 mA (Blue)
*7 GM4WA25300A: I_F = 21 mA (Red), I_F = 25 mA (Green), I_F = 7 mA (Blue)
*8 GM1WA55311A, GM5WA94300A, GM4WA25300A, GM5WA06256A series: Tc = 25°C


GM1WA55311A


GM5WA06256A


GM5WA06310A


GM5WA06256Z


GM5WA06270A


GM5WA94300A


GM4WA25300A

☆New product

■ LED Module for Lighting

◆ Features

(1) Size: 18 mm × 18 mm, 1.5 mm thickness* Square module for light source.
(2) 1 module (30 LEDs): White type 280 lm (3.6 W)
(3) Luminous efficiency: White type 78 lm/W
(4) No interconnection substrate necessary and is directly installable to heat sink.

*Excluding emitting parts

GW5BWC15L02 series

(I_F = 360 mA, Tc = 25°C)

BW White				BD Light bulb color				BN High color rendering			
	Color coordinates (x, y)	Color temp. (K) TYP.	Luminous flux (lm) TYP.		Color coordinates (x, y)	Color temp. (K) TYP.	Luminous flux (lm) TYP.		Color coordinates (x, y)	Color temp. (K) TYP.	Luminous flux (lm) TYP.
☆GW5BWC15L02	(0.35, 0.36)	5 000	280	☆GW5BDC15L02	(0.45, 0.41)	2 800	200	☆GW5BNC15L02	(0.35, 0.35)	5 000	190
								☆GW5BNC15L12	(0.31, 0.32)	6 500	190

☆New product
★Under development

■ Laser Diodes

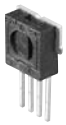
◆Model Configurations

• For applications other than optical discs

Wavelength (nm)	Absolute maximum ratings (mW)*1	Package	
		 ø5.6 mm Metal type	 ø3.3 mm Metal type
405 band	25	☆GH04020B2AE	
	25	GH04020A2GE	
	150	☆GH04125A2AE	
	130	GH04P21A2GE	
660 band	10		GH06510F4A
785 band	10	GH07810C2K	
	25	GH07825C2K	

*1 The absolute maximum ratings are not to be exceeded under any conditions whatsoever, whether in testing or actual use.

• For optical disc use*3

Wavelength (nm)	Absolute maximum ratings (mW)*1	Package		
		 ø5.6 mm Metal type	 ø3.3 mm Metal type	 1.8 mm t Resin type
405 band	20	GH04020A2G	GH04020A4G	
	210*2	GH04P21A2G		
	250*2	☆GH04P25A2G	☆GH04P25A4G	
660 band	240*2	GH06P24A2C		GH16P24A8C
	350*2			GH16P35A8C
	400*2			☆GH16P40A8C
785 band	240*2	GH07P24C1C	GH07P24C4C	
	280*2	★GH07P28F1C	★GH07P28F4C	

*1 The absolute maximum ratings are not to be exceeded under any conditions whatsoever, whether in testing or actual use.
*2 Optical power output MAX. (mW)
*3 Models for optical disc use can change considerably, so depending on the time it takes to contact us, there is the possibility that production will have stopped for a specific model. For this reason, we ask for your understanding, as sample sales may be impossible.

☆New product
★Under development

RoHS Pb FREE

◆Specifications

• Laser diodes lineup for applications other than optical discs

(Tc = 25°C)

Model No.	Wave-length (nm)	Absolute maximum ratings*1 CW (Continuous wave)	Features	Applications	Terminal connec-tions
☆GH04020B2AE	405 band	25	ø5.6 mm CAN package, operating temperature: 70°C MAX., with built-in monitor PD	Laser displacement gauge, light sources, etc.	A
☆GH04125A2AE		150	ø5.6 mm CAN package, operating temperature: 70°C MAX., with built-in monitor PD	Laser displacement gauge, light sources, etc.	A
GH04020A2GE		25	ø5.6 mm CAN package, operating temperature: 70°C MAX.	Laser displacement gauge, light sources, etc.	E
GH04P21A2GE		130	ø5.6 mm CAN package, operating temperature: 70°C MAX.	Laser displacement gauge, light sources, etc.	E
GH06510F4A	660 band	10	ø3.3 mm CAN package, operating temperature: 70°C MAX., with built-in monitor PD	Bar code reader, laser displacement gauge, etc.	A
GH07810C2K	785 band	10	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	

• Laser diodes lineup for optical disc use*2

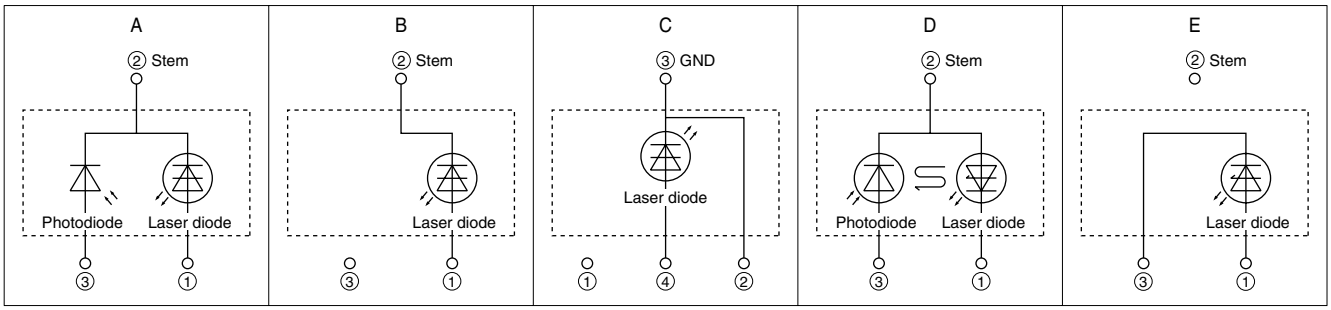
(Tc = 25°C)

Model No.	Wave-length (nm)	Absolute maximum ratings*1 CW (Continu-ous wave)	Pulse	Features	Applications	Terminal connec-tions
GH04020A2G	405 band	20	—	ø5.6 mm CAN package, operating temperature: 70°C MAX.	Blu-ray disc playback	E
GH04020A4G		20	—	ø3.3 mm CAN package, operating temperature: 70°C MAX.	Blu-ray disc playback	E
GH04P21A2G		105	210	ø5.6 mm CAN package, operating temperature: 70°C MAX. (pulse drive)	Blu-ray disc recording	E
☆GH04P25A2G		125	250	ø5.6 mm CAN package, operating temperature: 80°C MAX. (pulse drive)	Blu-ray disc recording	E
☆GH04P25A4G		125	250	ø3.3 mm CAN package, operating temperature: 80°C MAX. (pulse drive)	Blu-ray disc recording	E
GH06P24A2C	660 band	100	240	ø5.6 mm CAN package, operating temperature: 75°C MAX. (pulse drive)	Double-layer DVD 4× writing	B
GH16P24A8C		100	240	1.8 mm frame package, operating temperature: 80°C MAX. (pulse drive)	Double-layer DVD 4× writing	C
GH16P35A8C		125	350	1.8 mm frame package, operating temperature: 80°C MAX. (pulse drive)	Double-layer DVD 8× to 16× recording	
☆GH16P40A8C		135	400	1.8 mm frame package, operating temperature: 80°C MAX. (pulse drive)	Double-layer DVD 8× to 16× recording	
GH07P24C1C	785 band	120	240	ø5.6 mm CAN package, operating temperature: 75°C MAX. (pulse drive)	CD-R/RW (MAX. 48× to 52× writing)	B
★GH07P28F1C		150	280	ø5.6 mm CAN package, operating temperature: 80°C MAX. (pulse drive)	CD-R/RW (MAX. 48× to 52× 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. 48× to 52× writing)	
★GH07P28F4C		150	280	ø3.3 mm CAN package, operating temperature: 80°C MAX. (pulse drive)	CD-R/RW (H/H, slim dual-purpose) (MAX. 48× to 52× writing)	

*1 The absolute maximum ratings are not to be exceeded under any conditions whatsoever, whether in testing or actual use. For recommended optical power output, consult the specification sheet or data sheet for each model.

*2 Models for optical disc use can change considerably, so depending on the time it takes to contact us, there is the possibility that production will have stopped for a specific model. For this reason, we ask for your understanding, as sample sales may be impossible.

• Terminal Connections



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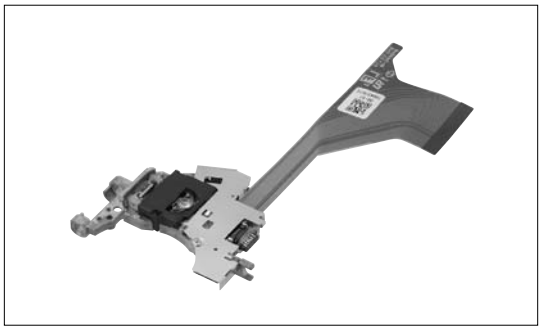
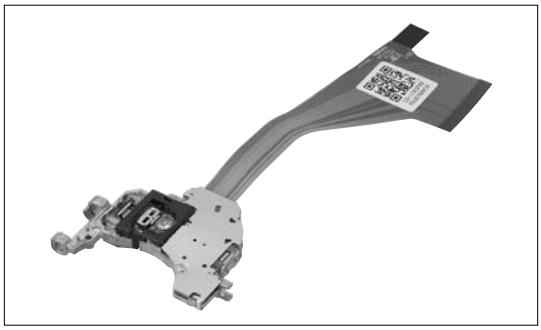
■ Slim Combo Drive Pickup <DD-57>



◆ **Features**

- Thin type pickup compatible with half-inch-height drive (12.7 mm thickness)
- Playback speed: 8× (DVD-ROM), 24× (CD-ROM)
- Recording speed: 24× (CD-R), 24× (CD-RW)
- DVD-RAM readable
- Outline dimensions: W 38.6 × H 7.3 × D 48.7 (mm)
- Weight: Approx. 11 g

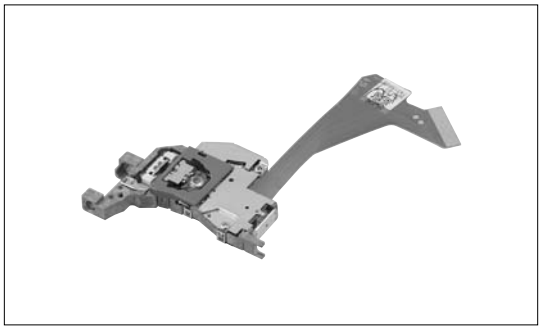
■ Slim DVD Super-Multi Drive Pickup <DD-115>



◆ **Features**

- Thin type pickup compatible with half-inch-height drive (12.7 mm thickness)
- Playback speed: 8× (DVD-ROM), 24× (CD-ROM)
- Recording speed: 8× (DVD±R, +RW, ±R/+RW(DL))
  6× (DVD-RW, -RW(DL))
  5× (DVD-RAM)
  24× (CD-R/RW)
- Outline dimensions: W 35.6 × H 7.3 × D 48.7 (mm)
- Weight: Approx. 13.5 g

■ DVD Pickup for Automotive Use <HPD-61>



◆ **Features**

- Compact, thin (7.3 mm) pickup
- Playable disk: DVD-ROM, CD-ROM
- Operating temperature: –20 to +80°C
- Outline dimensions: W 30.2 × H 7.3 × D 48.7 (mm)
- Weight: Approx. 13.5 g