☆New product
★Under development

RoHS

■Laser Diodes

◆Package Lineup

· Can

① ø9 mm Can	② ø5.6 mm Can	③ ø3.8 mm Can	④ ø3.3 mm Can




· Frame

⑤ t1.8 mm Frame

◆Specifications

<High Output Laser Diodes>

(Tc = 25°C)

Package	Model No.	Wavelength (band) λp (nm)	Absolute maximum ratings*1		Characteristics								Emitter Quantity	Terminal connections	Applications
			Iop (mA)	Top (°C)	Po (mW)	Ith (mA)	Iop (mA)	Vop (V)	ηd (mW/mA)	λp (nm)	θ//*2 (°)	θ⊥*2 (°)			
① ø9 mm Can	★GH04C05B9G	440	3 500	0 to +60	5 000	350	3 000	4.7	1.9	(tbd)	(tbd)	(tbd)	1	9	Display, etc.
	☆GH04C03A9G	455	2 800	0 to +60	3 500	260	2 100	4.7	1.9	455	10*3	41*3	1	9	
	★GH04C05A9G		(tbd)	(tbd)	5 000	400	3 000	4.25			(tbd)	(tbd)			
	☆GH05C01A9G	520	1 400	0 to +60	600	220	1 100	5.2	0.65	520	13*3	45*3	1	(tbd)	
	★GH05C01B9G		(tbd)		1 000	(tbd)	(tbd)	(tbd)	(tbd)	(tbd)	(tbd)	(tbd)			
	★GH06C01A9G	638	(tbd)	−10 to +45	1 200	380	1 400	2.25	(tbd)	640	5*3	36*3	1	9	
	★GH06C02A9G		—	0 to +55	2 100	550	2 350	2.3	1.15		8*3	70*3	2	9	
	★GH06C02B9G				2 500	500	2 700			639					

*1 The absolute maximum ratings are the limits that are not to be exceeded under any condition whatsoever, whether in testing or in actual use.
*2 Full angle of 50% peak intensity.
*3 Full angle of $1/e^2$ peak intensity.

<Multi-chip laser diodes>

(Tc = 25°C)

Package	Model No.	Wavelength (band) λp (nm)	Light output Po (W)	Applications
Multi-chip package	★GH7AB95AM8	455	95	Projector, etc
	★GH7BB18AM8	520	18	
	★GH7CB43AM8	638/640	43	

★Under development

<Laser Diodes for Automotive> *Consumer use possible

Package	Model No.	Wavelength (band) λp (nm)	Absolute maximum ratings*1 Tc (°C)	Absolute maximum ratings*1 Po (mW)	Characteristics at 25°C Po (mW)	Ith (mA)	Iop (mA)	Vop (V)	ηd (mW/mA)	λp (nm)	θ//*2 (°)	θ⊥*2 (°)	Built-in monitor PD	Terminal connections	Applications
② φ5.6mm Can	★GH0451AA2H	455	–40	55	100	28	105	5.4	1.3	455	9	22	–	8	Display, etc.
			–10	105											
			+70	105											
			+95	55											
	★GH0451CA2H		–40	(tbd)	120		120	5							
			–10	125											
			+70	125											
			+95	55											
	★GH0521AA2H	520	–40	55	100	70	210	6.5	0.7	520	8	22	–	8	
			–10	105											
			+50	105											
			+95	55											
	★GH0521GA2H		–40	(tbd)	160		310	6	0.65						
			+10	165											
			+40	165											
			+95	55											
	★GH0632BA2G	638	–40	105	200	55	230	2.65	1.15	639	8	15	–	9	
			–20	150											
			+25	210											
			+35	210											
			+65	120											
			+85	30											
	★GH0642CA2H	640	–40	150	200	60	235	2.5	1.15	641	8	16.5	–	9	
			+25	220											
			+40	220											
			+85	85											
	★GH0652CA2G	650	–40	115	200	55	220	2.6	1.2	650	8	12.5	–	9	
			–20	150											
			+25	220											
			+55	220											
			+90	110											

<Laser Diodes for LiDAR>

(Tc = 25°C)

Package	Model No.	Wavelength (band) λp (nm)	Absolute maximum ratings*1 Po (mW)	Absolute maximum ratings*1 Top (°C)	Characteristics Po (mW)	Ith (mA)	Iop (mA)	Vop (V)	ηd (mW/mA)	λp (nm)	θ//*2 (°)	θ⊥*2 (°)	Built-in monitor PD	Terminal connections	Remarks
② φ5.6mm Can	★GH09W30A2G	905	Pulse 40W	–40 to +85	Pulse 30W	700	30A	11	1.14	905	15	20	–	8	
	★GH09W90A2G		Pulse 120W		Pulse 90W	400		11.5	3.38		7.5	28			
	★GH09W90B2G	940	Pulse 100W	–40 to +85	Pulse 90W	700	30A	15	3.14	940	8	25	–	8	

*1 The absolute maximum ratings are the limits that are not to be exceeded under any condition whatsoever, whether in testing or in actual use.
*2 Full angle of 50% peak intensity.

Note: Please inquire about combinations of packages and characteristics other than the above.

☆New product
★Under development

<Laser Diodes>

(Tc = 25°C)

Package	Model No.	Wavelength (band) λp (nm)	Absolute maximum ratings*1		Characteristics								Built-in monitor PD	Terminal connections	Applications
			Po (mW)	Top (°C)	Po (mW)	Ith (mA)	Iop (mA)	Vop (V)	ηd (mW/mA)	λp (nm)	θ//*2 (°)	θ⊥*2 (°)			
② φ5.6mm Can	GH0401FA2G	405	155	−10 to +75	150	40	130	5	1.7	405	9	19	—	8	Sensor, etc.
	GH0401FA2K												○	4	
	GH04W10A2GC		350	0 to +50	300	140	325	4.5	1.8	406	14*3	41*3	—	9	
	★GH0406AA2G		(tbd)	0 to +30	600	120	430	4.4	2	405	14*3	38*3			
	GH04580A2G	450	85	−10 to +70	80	22	84	5.1	1.3	450	10	24	—	8	Display, etc.
	GH04C01A2G		1 650	−10 to +50	1 600	200	1 200	5	1.5		6.5	23		9	
	GH04850B2G	487	55	−10 to +60	50	40	105	6	0.8	487	8	23	—	8	
	GH05030D2L	505	35	−10 to +60	30	30	75	6	0.65	505	8	23	—	12	
	GH05130G2K	515	35	−10 to +60	30	30	85	6.5	0.55	515	7.5	22	○	4	
	☆GH05230H2K	520	35	−10 to +60	30	25	70	6.5	0.65	520	7	22	○	4	
	GH05280E2K		85		80	65	180		0.7			23			
	☆GH0521DE2G		135		130	70	270	6.7	0.65		8	22	—	8	
	GH06315A1K	635	16	−10 to +50	15	18	45	2.4	0.6	635	8	38	○	4	
	GH06330A2G	638	30	−10 to +60	30	30	50	2.3	1.4	638	7	16	—	8	
	GH0631IA2GC		185		180	70	215	2.55	1.15		8	13		9	
	★GH0632BA2GC		210		200	55	230	2.65		639		15		9	
	GH0637AA2G		700	−10 to +40	700	110	810	2.46	1	638	16	35			
	★GH0652CA2GC	650	220	−10 to +70	200	55	220	2.6	1.2	650	8	12.5	—	9	
	★GH06610A2KC	660	12	−40 to +90	10	15	24	2.2	1.1	660	12	33	○	4	
	GH06P25A1C		100	−10 to +70	95	40	122	2.4		661	10	16	—	3	
	GH06P25A2CC									660		15.5			
	☆GH07P28F1C	785	150	−10 to +70	100	35	135	2.4	1	784	8	16	—	3	
	GH0832BA1K	830	210	−10 to +70	200	35	215	2.1	1.1	830	9	18	○	4	Sensor, etc.
	☆GH0832FA2G		260		250	45	255	2.2	1.15		8	15	—	8	
	☆GH0852WA2G	850	700	−10 to +70	700	275	975	1.8	1	850	17	45	—	8	
	☆GH0942FA2G	940	260	−10 to +70	250	(tbd)	(tbd)	(tbd)	(tbd)	940	(tbd)	(tbd)	—	8	
	☆GH0942WA2G		700		700	315	800	1.8	1		10	35			
③ φ3.8mm Can	GH04590A5G	450	95	−10 to +50	90	28	100	5.2	1.3	450	9	24	—	8	Display, etc.
	GH05290A5G	520	95	−10 to +50	90	60	185	6.75	0.7	520	8	23	—	8	
	GH0521DE5G		135		130	70	270	6.7	0.65			22			
	GH0631CA5GC	638	120	−10 to +60	120	50	150	2.5	1.2	638	8	15	—	8	
	GH0631IA5G		185		150	60	190		1.15		7.5				
④ φ3.3mm Can	GH06510F4A	660	10	−10 to +70	7	17	26	2.2	0.85	660	13	28	○	1	Sensor, etc.
	★GH06610A4A		12	−10 to +80	10	15	24	2.2	(tbd)		12	33	○	13	
	GH07P28F4C	785	150	−10 to +70	100	35	135	2.4	1	784	8	16	—	3	
⑤ t1.8mm Frame	GH1631AA8C	638	100	−10 to +60	100	50	130	2.45	1.2	638	8	15	—	6	Display, etc.
	GH16P32B8C	660	100	−10 to +70	90	42	120	2.3	1.16	661	9.3	15	—	6	

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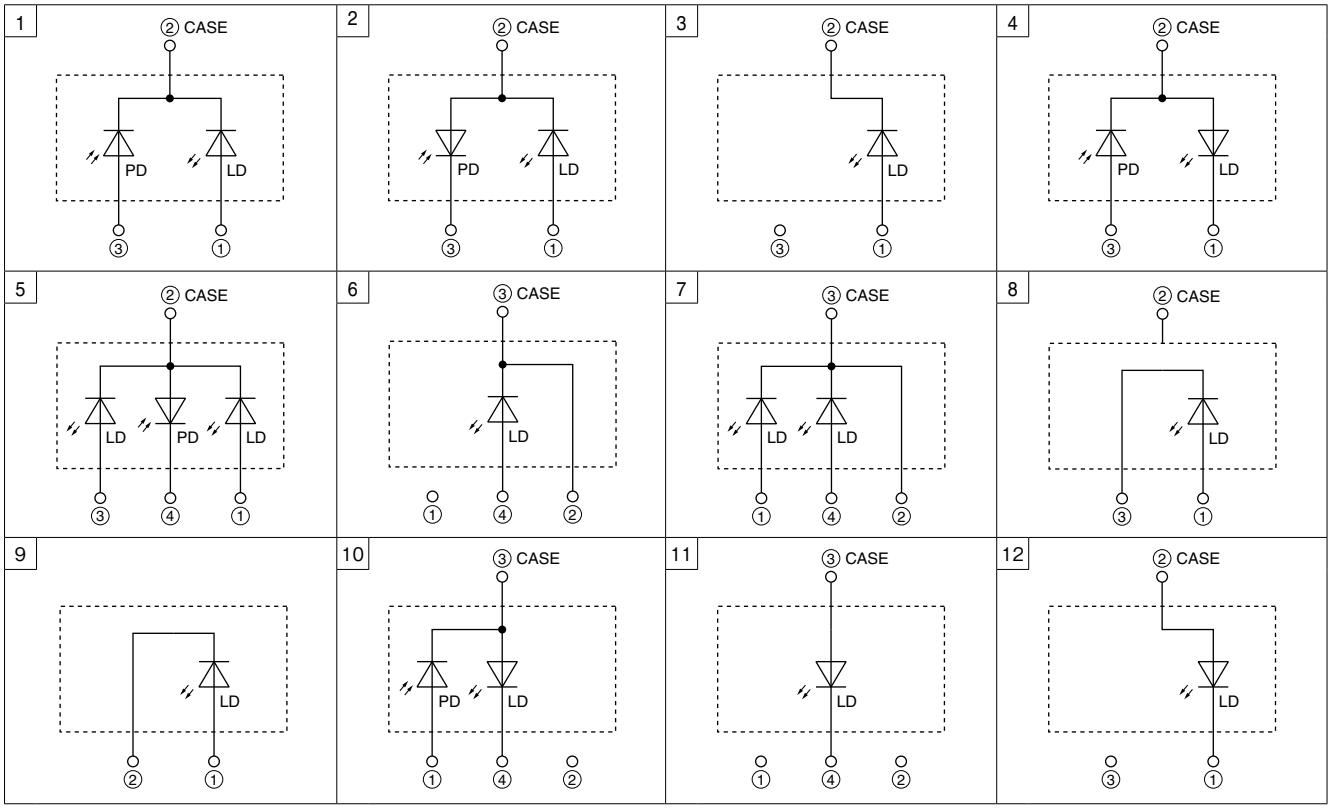
*2 Full angle of 50% peak intensity.
*3 Full angle of $1/e^2$ peak intensity.

Note: Please inquire about combinations of packages and characteristics other than the above.

★Under development

RoHS

◆Terminal Connections



<Laser diode chips>

(Tc = 25°C)

Form	Model No.	Wavelength (band) λp (nm)	Emitter size Ew (μm)	Light output Po (W)	Applications
Laser chip	★GC5GW1080Z	808	190	10	
	★GC5GW1088Z	880	350	10	
	★GC5GW1091Z	915	96	10	
	★GC5GW1591Z		190	15	
	★GC5GW1094Z	940	96	10	
	★GC5GW1594Z		190	15	
	★GC5GW1097Z	976	96	10	
	★GC5GW1597Z		190	15	
	★GC5GW03F5Z	1 550	96	3	

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