

LED chip type

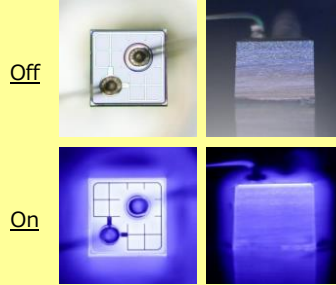
Chip type A

- Conventional LED
- Liquid Phase Epitaxy
- Variety of material and wavelength



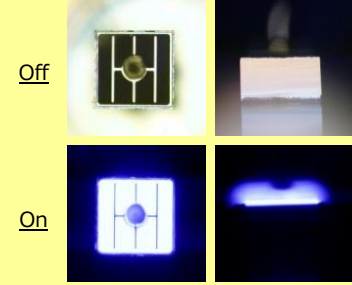
Chip type B

- Transparent type LED
- Vapor Phase Epitaxy
- High light output power
- Two bonding pads on top side



Chip type C

- Reflection type LED
- Vapor Phase Epitaxy
- High light output power
- Strong vertical light



Visible LED chip list (565-700nm)

Chip type	Structure (Epi/Sub)	Product	Polarity	Wavelength		Chip size		Characteristics				Plant ※
				(nm)	Symbol	X & Y (μm)	Z (μm)	IF (mA)	IV (mcd)	Power (mW)	VF (V)	
A	GaP/GaP	L-34P-V(HCL)	P-up	565	Hue	230	270	20	9.5	-	2.20	SKEC
		L-34PY-W(HCL)	P-up	567	Hue	200	270	20	10.0	-	2.25	SKEC
		L-35PH-V(HCL)	P-up	570	Hue	230	270	20	13.5	-	2.20	SKEC
		L-22P-W(HCL)	P-up	700	Hue	200	270	5	0.9	-	2.25	SKEC
	GaAsP/GaP	SLYAH-W	P-up	588	Hue	200	270	20	7.0	-	2.20	SKEC
		SLSS-W	P-up	615	Hue	210	270	20	3.0	-	2.10	SKEC
		SLOSH-X	P-up	630	Hue	190	220	20	6.3	-	2.10	SKEC
		SLRSH-W	P-up	645	Hue	200	270	20	4.0	-	2.00	SKEC
	AlGaAs/GaAs	AR-26	N-up	660	λp	210	280	20	9.5	-	1.80	SKEC
		ARH-260	N-up	660	λp	235	240	20	13.0	-	1.80	SDP
		ARH-300B	N-up	660	λp	275	280	20	15.5	-	1.80	SDP
	AlGaAs/AlGaAs	ARS-30	N-up	660	λp	230	150	20	18.0	-	1.85	SKEC
ARU-35		P-up	660	λp	325	180	20	33.0	-	1.80	SDP	
ABU-35		P-up	670	λp	325	180	20	-	2.4	1.80	SDP	
B	AlGaInP/GaP	GYA-280H	P, N up	590	λd	270	270	20	500	-	2.25	SKEC
		GYA-340BH	P, N up	590	λd	330	270	20	450	-	2.20	SKEC
		GOC-280	P, N up	605	λd	280	270	20	500	-	2.25	SKEC
		HOB-350F	P, N up	615	λd	325	270	20	800	-	2.10	SKEC
		GOA-340B	P, N up	620	λd	330	270	20	400	-	2.20	SKEC
		GOA-350	P, N up	620	λd	325	270	20	450	-	2.10	SKEC
		GOD-230T	P, N up	623	λd	220	200	20	450	-	2.20	SKEC
		GOD-280	P, N up	625	λd	280	270	20	300	-	2.20	SKEC
		GRA-315H	P, N up	630	λd	305	270	20	350	-	2.10	SKEC
		HRP-350F	P, N up	660	λp	325	270	20	-	11.0	2.10	SKEC
C	AlGaInP/Si	R6D-52SSB	N-up	615	λd	500	190	150	6,000	-	2.20	SDP
	AlGaInP/Ge	R66-26GSA	N-up	660	λp	240	190	20	-	11.5	2.00	SDP
		R66-35GSA	N-up	660	λp	330	190	20	-	13.0	1.90	SDP
		R69-52GSA	N-up	685	λp	500	190	140	-	100	2.10	SDP

※ SDP : SHOWA DENKO PHOTONICS CO., LTD. (Location/Saitama-Pref.)

SKEC : SHOKO ELECTRONICS CO., LTD. (Location/Kagoshima-Pref.)

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Infrared LED chip list (700-970nm)

Chip type	Structure (Epi/Sub)	Product	Polarity	Peak wavelength (nm)	Chip size		Characteristics			Plant ※
					X & Y (μm)	Z (μm)	IF (mA)	Power (mW)	VF (V)	
A	AlGaAs/GaAs	BRH-35	N-up	700	325	280	20	1.10	1.75	SDP
		BCH-260	N-up	730	235	240	20	1.30	1.70	SDP
		BCH-35	N-up	730	325	280	20	1.10	1.70	SDP
		CBH-260	N-up	770	235	250	20	1.25	1.64	SDP
		CBH-35	N-up	770	325	280	20	1.10	1.70	SDP
		CR-35	N-up	830	325	280	20	0.80	1.70	SDP
		CRH-35	N-up	830	325	280	20	1.00	1.50	SDP
		DCK-260B	P-up	850	240	230	10	0.96	1.45	SDP
		DCK-300B	P-up	850	280	230	10	0.97	1.45	SDP
		IR-300M	P-up	940	260	280	20	1.50	1.25	SDP
		IR-44	P-up	940	164	200	100	3.50	1.60	SKEC
		IR-46	P-up	940	185	180	20	1.20	1.25	SKEC
		IRH-280SB	P-up	940	260	240	20	2.00	1.25	SDP
		IRH-35M	P-up	940	325	280	20	2.20	1.20	SDP
		IRH-46	P-up	940	185	180	20	1.80	1.28	SKEC
	IRN-260C	N-up	950	240	230	20	1.30	1.30	SDP	
	AlGaAs/AlGaAs	CBU-350	N-up	780	325	155	20	2.80	1.50	SDP
		DCP-260C	P-up	850	230	190	10	1.25	1.45	SKEC
		DCP-260D	P-up	850	230	190	10	1.50	1.45	SKEC
		DCP-260SB	P-up	850	240	200	10	1.60	1.45	SDP
		DCP-35J	P-up	850	325	190	20	5.30	1.43	SDP
		DPA-350MJ	P-up	865	325	190	20	5.00	1.38	SDP
		DXA-300J	N-up	870	275	190	20	5.00	1.55	SDP
		DXA-350J	N-up	870	325	190	20	4.40	1.40	SDP
		DR-300UC	N-up	880	280	200	10	0.90	1.27	SDP
		DR-40	N-up	880	375	260	20	1.60	1.30	SDP
		DRH-35	N-up	880	325	210	20	2.00	1.35	SDP
		KM89528NF	N-up	895	230	175	20	3.60	1.33	SKEC
		KM89528NFMA-A	N-up	895	230	175	20	4.20	1.33	SKEC
		FR-35	N-up	910	325	260	20	1.50	1.28	SDP
KM91028NF		N-up	910	230	175	20	3.80	1.37	SKEC	
KM91028NFMA-A	N-up	910	250	175	20	4.30	1.37	SKEC		
C	AlGaInP/Ge	R78-35GSE	N-up	780	330	190	20	8.00	1.60	SDP
		R81-35GSE	N-up	810	330	190	20	8.00	1.55	SDP
		R85-26GSE	N-up	850	240	190	20	7.50	1.60	SDP
		R85-35GSE	N-up	850	330	190	20	8.50	1.50	SDP
		R85-52GSE	N-up	850	500	190	20	7.50	1.40	SDP
		R87-35GSE	N-up	870	330	190	20	8.00	1.45	SDP
		R94-35GSE	N-up	940	330	190	20	7.00	1.40	SDP
		R97-35GSE	N-up	970	330	190	20	7.00	1.40	SDP
	AlGaAs/Ge	P85-26ATA	P-up	850	240	265	20	8.00	1.55	SDP
		P85-26GTA	P-up	850	240	190	20	8.00	1.55	SDP
	AlGaAs/Ge (Double Junction)	R81-110GWS	N-up	810	1,080	190	1,000	700	3.40	SDP
		R85-110GWS	N-up	850	1,080	190	1,000	750	3.20	SDP
R94-110GWS		N-up	940	1,080	190	1,000	680	3.00	SDP	

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