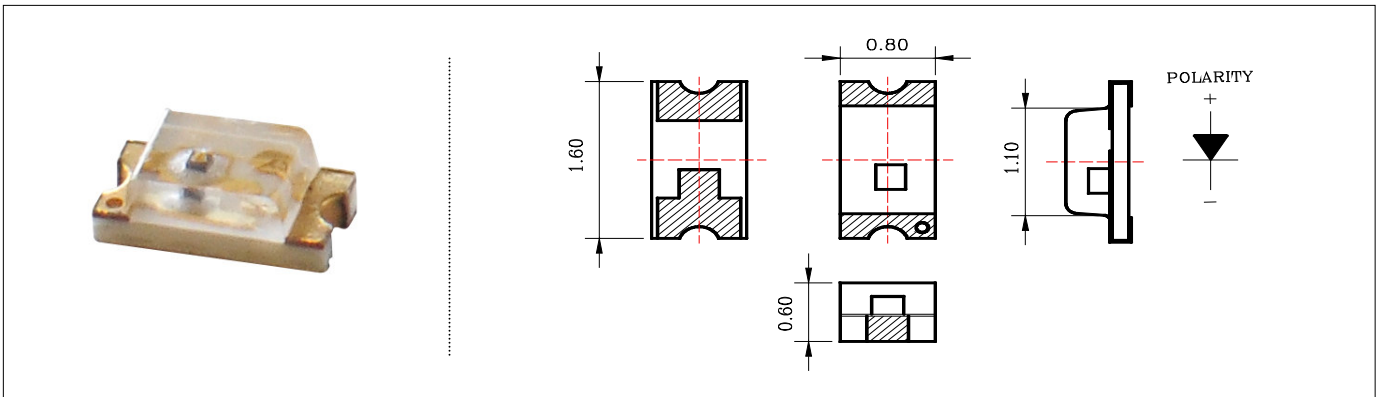
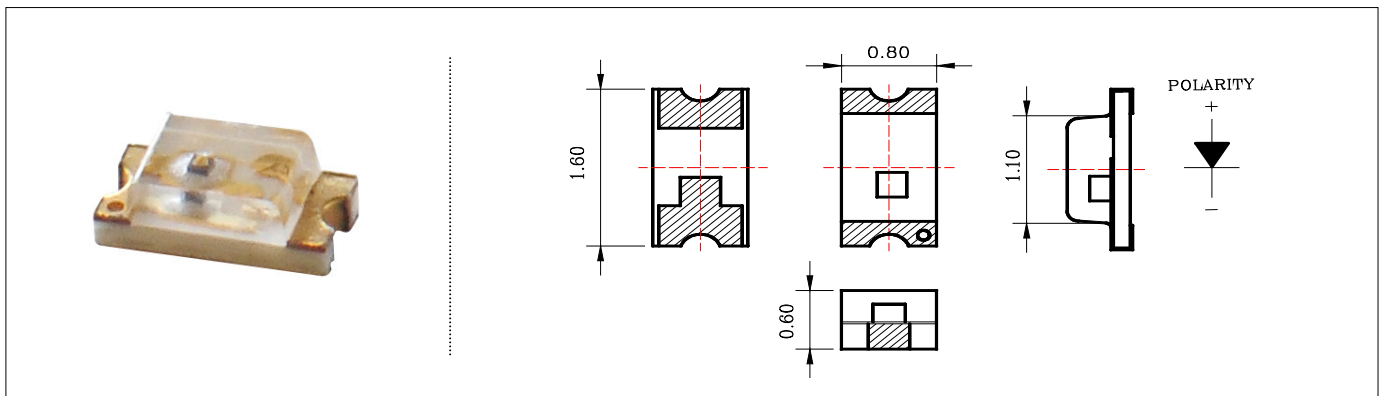


L-C191XXXX -1.6x0.8x0.6mm SURFACE MOUNT DEVICE LED (0603)



Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-C191JRCT	AllnGaP	● Super Red	Water Clear	630	1.9	2.4	70	120
L-C191JYCT	AllnGaP	● Super Yellow	Water Clear	590	2.0	2.4	100	120
L-C191JFCT	AllnGaP	● Super Amber	Water Clear	605	2.0	2.4	80	120
L-C191JGCT	AllnGaP	● Super Yellow Green	Water Clear	570	2.05	2.4	30	120
L-C191LGCT	InGaN	● Ultra Green	Water Clear	525	3.1	3.6	300	120
L-C191QYCT	AllnGaP	● Super Yellow	Water Clear	590	1.9	2.4	160	120

L-C191XXXX -1.6x0.8x0.6mm SURFACE MOUNT DEVICE LED (0603)

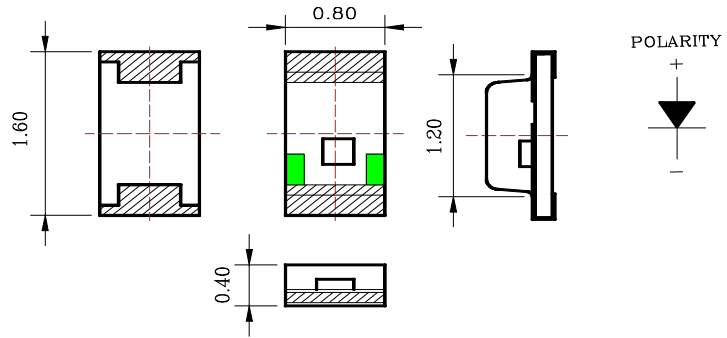


Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-C191KGCT	AllnGaP	● Super Yellow Green	Water Clear	570	2.05	2.4	30	120
L-C191KFCT	AllnGaP	● Super Amber	Water Clear	605	2	2.4	90	120
L-C191LBCT	InGaN	● Blue	Water Clear	470	3.3	3.6	100	120
L-C191TBCT(5mA)	InGaN	● Blue	Water Clear	470	2.8	3.1	20	120
L-C191WDT(5mA)	InGaN	● Cool White	Light Yellow Diffused	X:0.3 Y:0.3	2.8	3.1	150	120
L-C191TBZCT-XX(5mA)	InGaN	● Blue	Water Clear	470	2.8	3.1	40	120

SMD / IRM

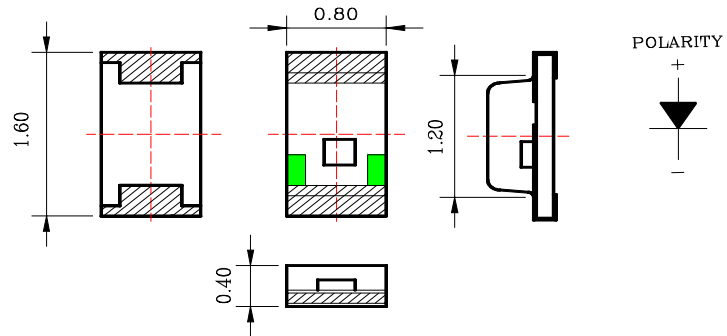
L-C192XXXX -1.6x0.8x0.4mm SURFACE MOUNT DEVICE LED (0603)

SMD / IRM



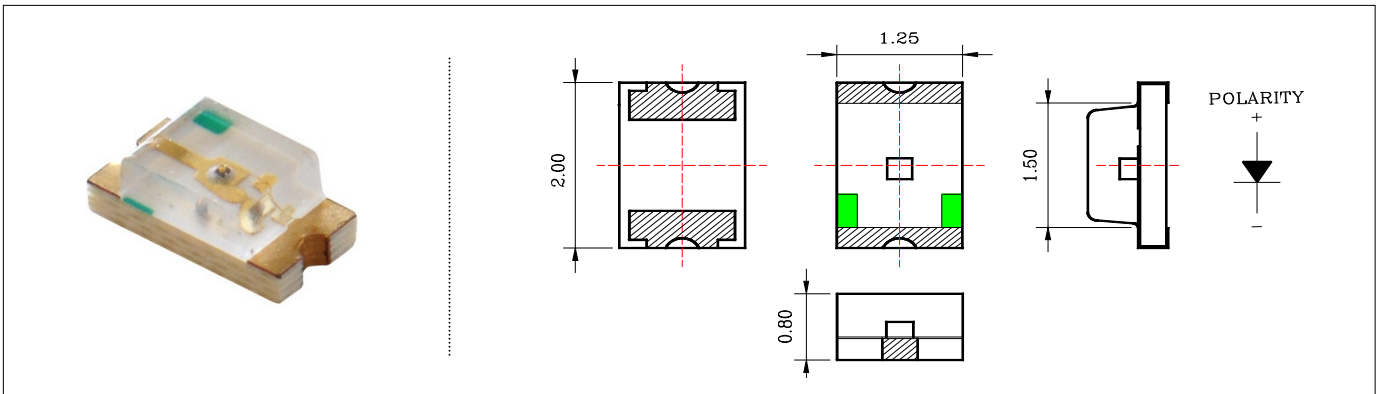
Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-C192JRCT	AllnGaP	● Super Red	Water Clear	630	1.9	2.4	50	120
L-C192JGCT	AllnGaP	● Super Yellow Green	Water Clear	570	2.05	2.4	30	120
L-C192LGCT	InGaN	● Ultra Green	Water Clear	525	3.1	3.5	300	120
L-C192KYCT	AllnGaP	● Super Yellow	Water Clear	590	2.05	2.4	70	120
L-C192KRCT	AllnGaP	● Super Red	Water Clear	630	1.9	2.4	50	120
L-C192WZDT-JD	InGaN	○ Cool White	Light Yellow Diffused	X:0.3 Y:0.3	3.1	3.4	320	120

L-C192XXXX -1.6x0.8x0.4mm SURFACE MOUNT DEVICE LED (0603)



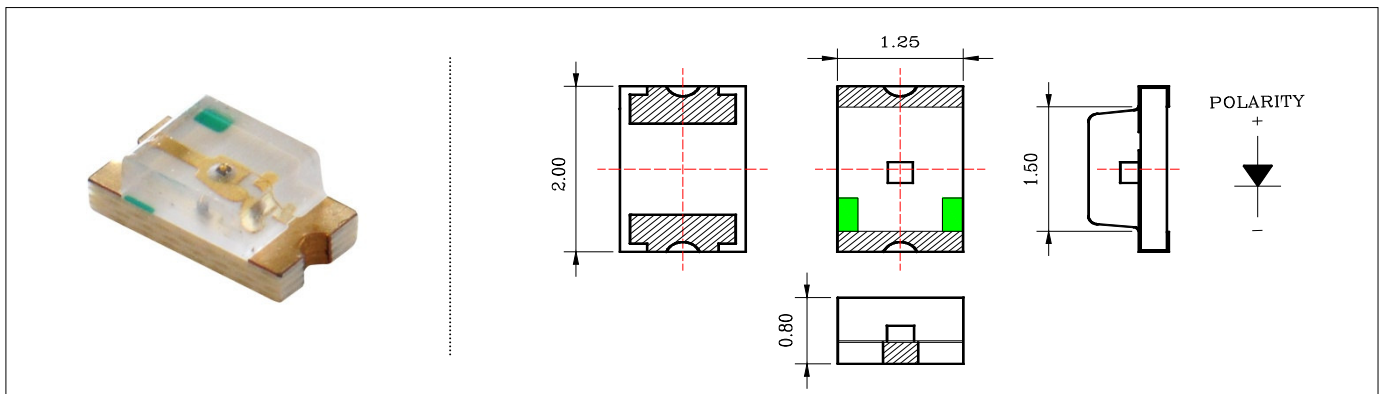
Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-C192KGCT	AllnGaP	● Super Yellow Green	Water Clear	570	2.05	2.4	30	120
L-C192KFCT	AllnGaP	● Super Orange	Water Clear	605	2	2.4	100	120
L-C192LBCT	InGaN	● Blue	Water Clear	470	3.3	3.6	100	120
L-C192TBCT(5mA)	InGaN	● Blue	Water Clear	470	2.8	3.1	16	120
L-C192WDT(5mA)	InGaN	○ Cool White	Light Yellow Diffused	X:0.3 Y:0.3	2.8	3.2	150	120
L-C192TBZ-XX(5mA)	InGaN	● Blue	Water Clear	470	2.8	3.1	16	120

L-C170XXXX -2.0x1.25x0.8mm SURFACE MOUNT DEVICE LED (0805)



Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-C170JRCT	AllnGaP	● Super Red	Water Clear	630	1.9	2.4	70	120
L-C170JYCT	AllnGaP	● Super Yellow	Water Clear	590	2.05	2.4	100	120
L-C170JFCT	AllnGaP	● Super Amber	Water Clear	605	2.0	2.4	80	120
L-C170JGCT	AllnGaP	● Super Yellow Green	Water Clear	570	2.05	2.4	30	120
L-C170LGCT	InGaN	● Ultra Green	Water Clear	525	3.1	3.6	300	120
L-C170QRCT	AllnGaP	● Super Red	Water Clear	630	1.9	2.4	100	120

L-C170XXXX -2.0x1.25x0.8mm SURFACE MOUNT DEVICE LED (0805)

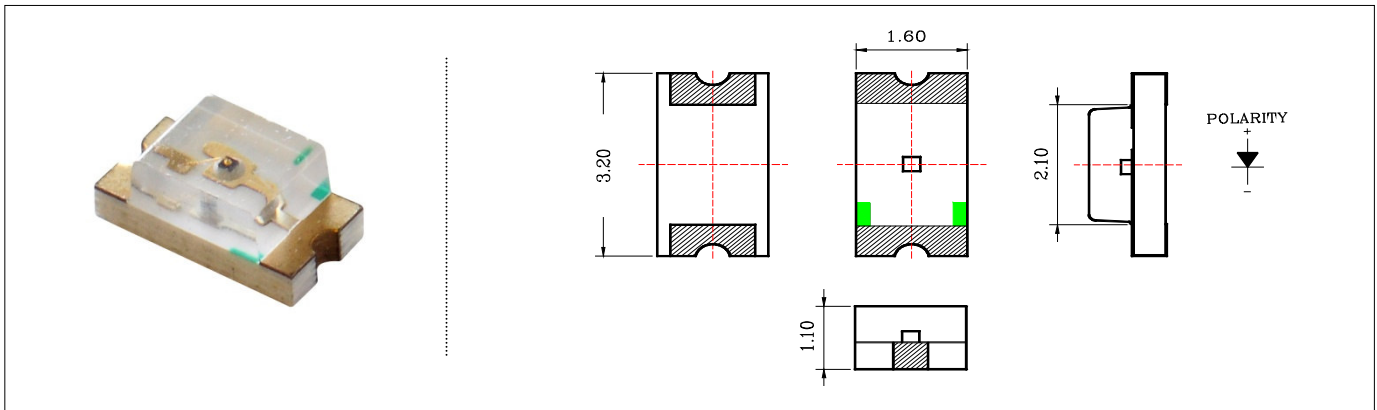


Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-C170KGCT	AllnGaP	● Super Yellow Green	Water Clear	570	2.05	2.4	30	120
L-C170KFCT	AllnGaP	● Super Amber	Water Clear	605	2	2.4	80	120
L-C170LBCT	InGaN	● Blue	Water Clear	470	3.3	3.6	100	120
L-C170TBCT(5mA)	InGaN	● Blue	Water Clear	470	2.8	3.1	16	120
L-C170WDT	InGaN	○ Cool White	Light Yellow Diffused	X:0.3 Y:0.3	3.2	3.5	350	120

SMD / IRM

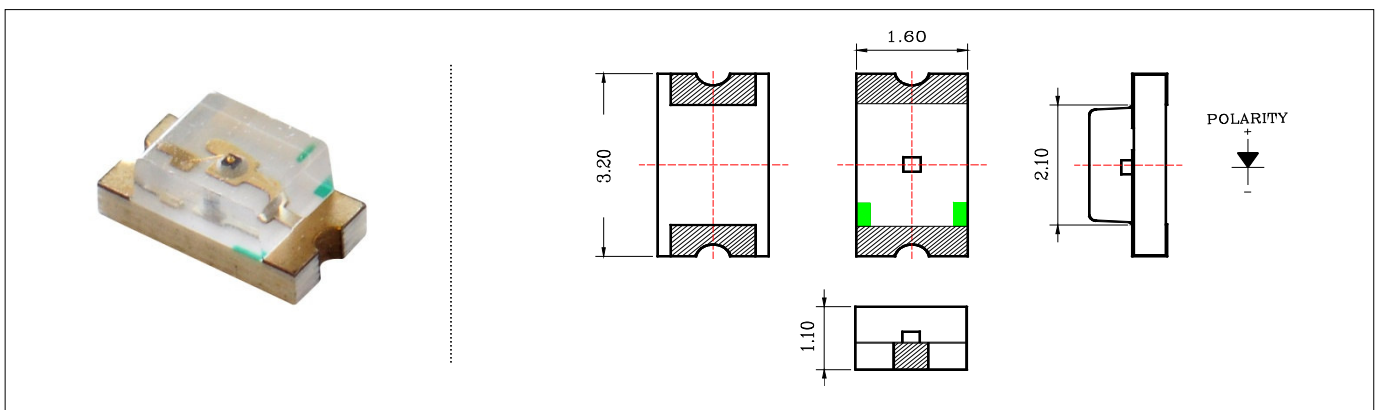
SMD / IRM

L-C150XXXX -3.2x1.6x1.1mm SURFACE MOUNT DEVICE LED (1206)



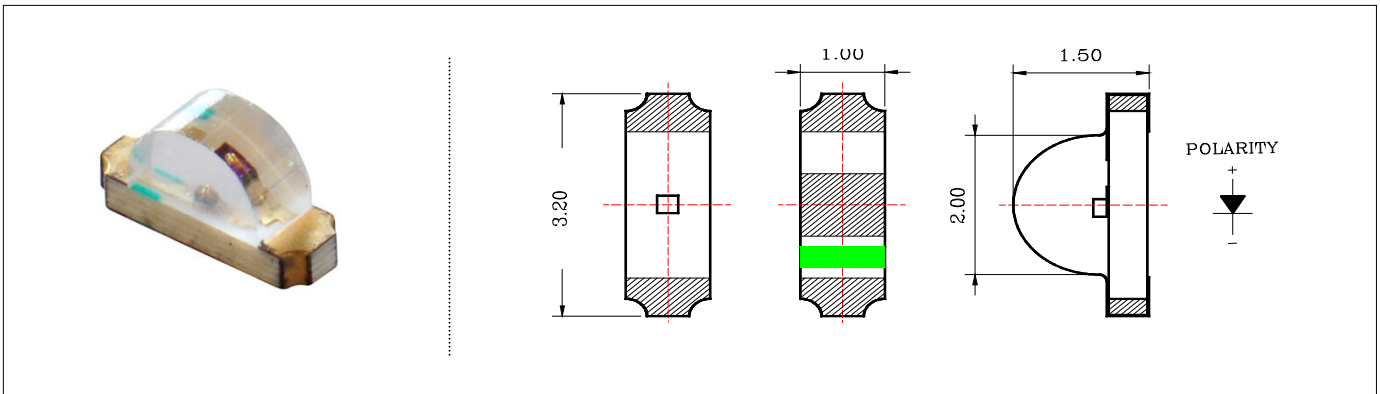
Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-C150JRCT	AllnGaP	● Super Red	Water Clear	630	1.9	2.4	80	120
L-C150JYCT	AllnGaP	● Super Yellow	Water Clear	590	2.05	2.4	75	120
L-C150JGCT	AllnGaP	● Super Yellow Green	Water Clear	570	2.05	2.4	40	120
L-C150JFCT	AllnGaP	● Super Amber	Water Clear	605	2	2.4	80	120
L-C150LGCT	InGaN	● Ultra Green	Water Clear	525	3.1	3.6	300	120
L-C150QYCT	AllnGaP	● Super Yellow	Water Clear	590	1.9	2.4	120	120

L-C150XXXX -3.2x1.6x1.1mm SURFACE MOUNT DEVICE LED (1206)



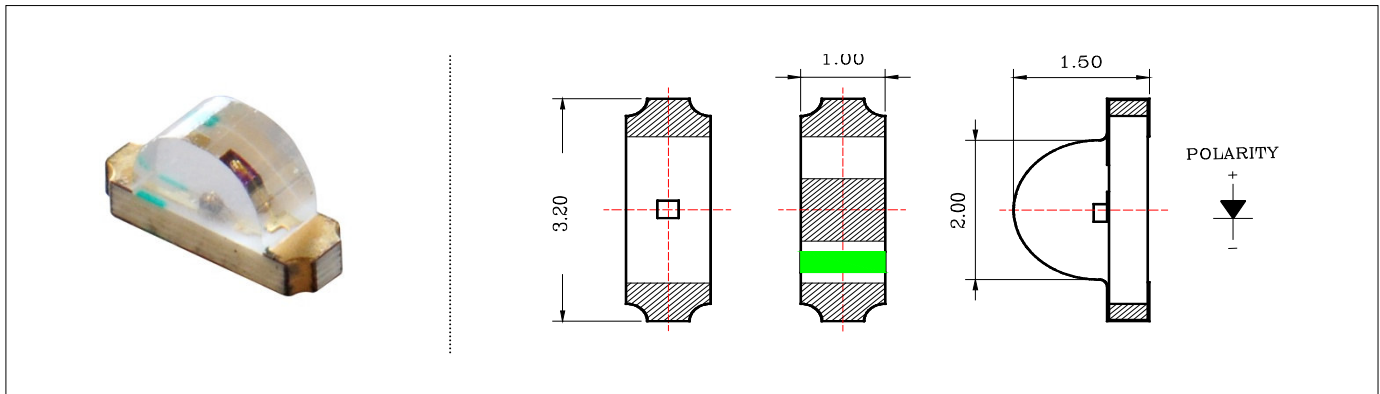
Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-150KFCT	AllnGaP	● Super Amber	Water Clear	605	2	2.4	80	120
L-C150LBCT	InGaN	● Blue	Water Clear	470	3.3	3.8	120	120
L-C150TBCT(5mA)	InGaN	● Blue	Water Clear	470	2.8	3.1	16	120
L-C150WDT	InGaN	● Cool White	Light Yellow Diffused	X:0.3 Y:0.3	3.2	3.5	220	120
L-C150TBZCT-AG(5mA)	InGaN	● Blue	Water Clear	470	2.8	3.1	22	120
L-C150WZDT-JD(2mA)	InGaN	● Cool White	Light Yellow Diffused	X:0.3 Y:0.3	2.7	2.9	45	120

L-S110XXXX -3.2x1.0x1.5mm SURFACE MOUNT DEVICE LED (1204)



Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-S110JRCT	AllnGaP	● Super Red	Water Clear	630	1.9	2.4	60	120
L-S110JYCT	AllnGaP	● Super Yellow	Water Clear	590	2.05	2.4	70	120
L-S110JFCT	AllnGaP	● Super Amber	Water Clear	605	2.0	2.4	80	120
L-S110JGCT	AllnGaP	● Super Yellow Green	Water Clear	570	2.05	2.4	50	120
L-S110LGCT	InGaN	● Ultra Green	Water Clear	525	3.1	3.6	300	120
L-S110QRCT	AllnGaP	● Super Red	Water Clear	630	1.9	2.4	120	120

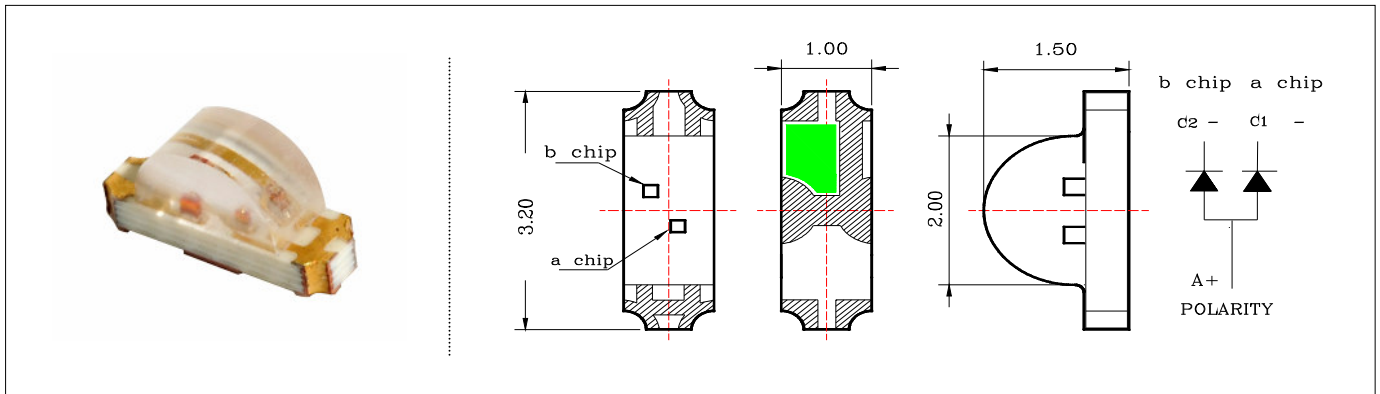
L-S110XXXX -3.2x1.0x1.5mm SURFACE MOUNT DEVICE LED (1204)



Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-S110KGCT	AllnGaP	● Super Yellow Green	Water Clear	570	2.05	2.4	30	120
L-S110KFCT	AllnGaP	● Super Amber	Water Clear	605	2	2.4	80	120
L-S110LBCT	InGaN	● Blue	Water Clear	470	3.3	3.6	120	120
L-S110TBCT(5mA)	InGaN	● Blue	Water Clear	470	2.8	3.1	20	120
L-S110WDT	InGaN	● Cool White	Light Yellow Diffused	X:0.3 Y:0.3	3.2	3.5	300	120
L-S110QECT	AllnGaP	● Super Orange	Water Clear	620	2.0	2.4	140	120

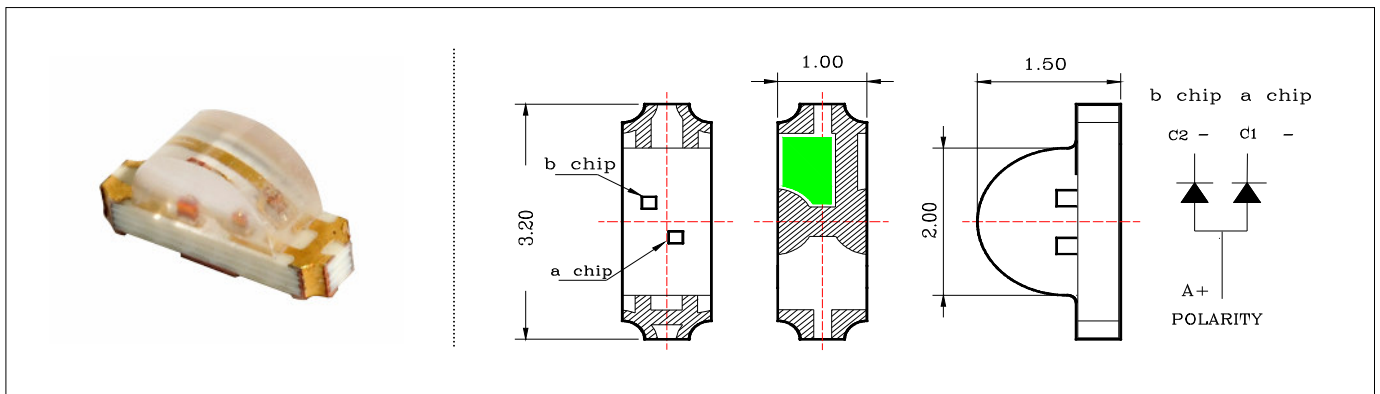
L-S115XXXXXX -3.2x1.0x1.5mm SURFACE MOUNT DEVICE LED (1204)

SMD / IRM



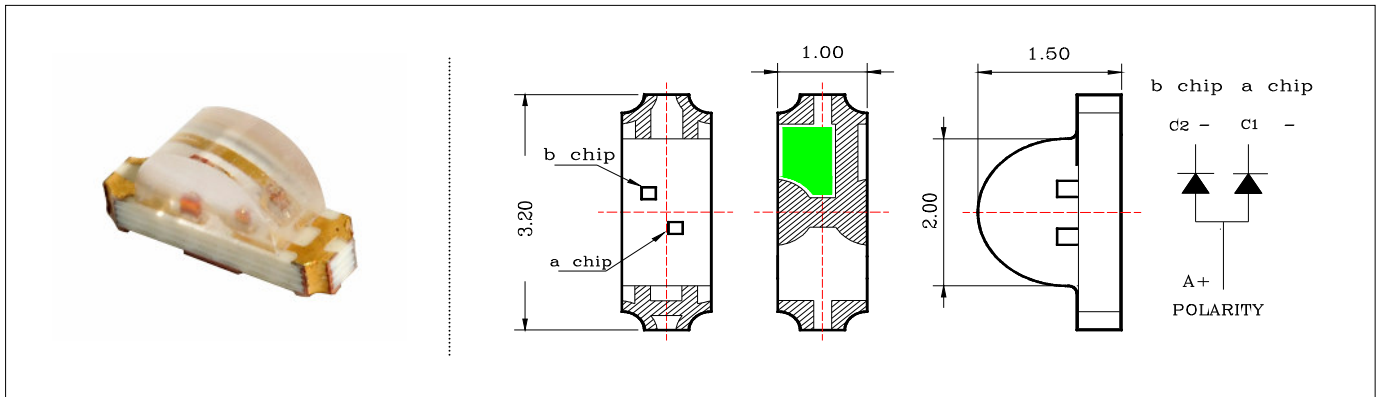
Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-S115KKGCT	AllnGaP	Super Yellow Green	Water Clear	570	2.05	2.4	50	120
	AllnGaP	Super Amber		605	2	2.4	80	
L-S115GECT	GaP	Yellow Green	Water Clear	570	2.1	2.6	12.5	120
	GaAsP	Super Orange		620	2.1	2.6	8.3	

LS115XXXXXX -3.2x1.0x1.5mm SURFACE MOUNT DEVICE LED (1204)



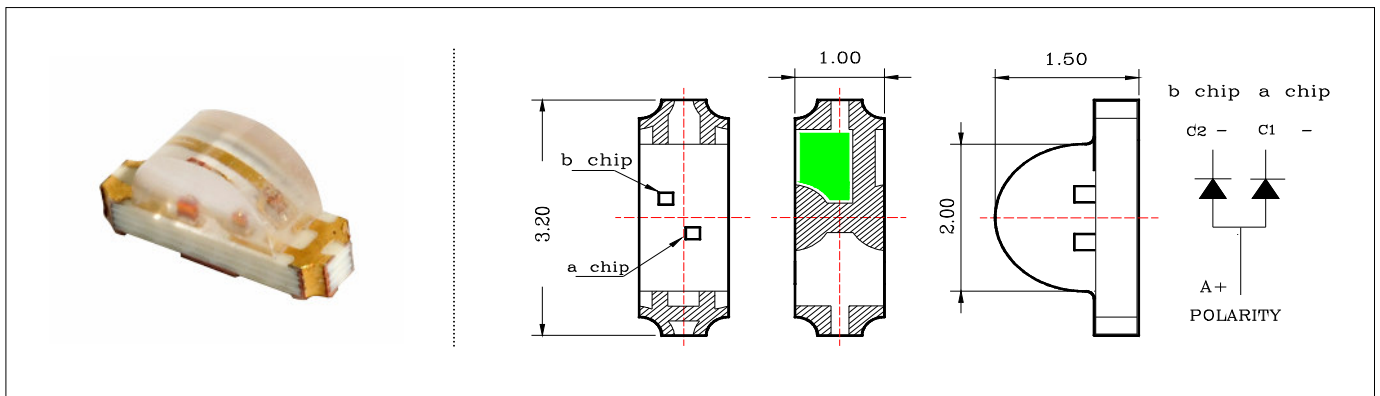
Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-S115KFLGCT	AllnGaP	Super Amber	Water Clear	605	2	3.1	30	120
	InGaN	Ultra Green		525	3.4	3.6	300	
L-S115KRKGCT-5A	AllnGaP	Super Red	Water Clear	630	1.8	2.4	20	120
	AllnGaP	Super Yellow Green		570	1.95	2.3	10	

L-S115XXXXXX -3.2x1.0x1.5mm SURFACE MOUNT DEVICE LED (1204)



Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-S115KGKRCT	AllnGaP	Super Yellow Green	Water Clear	570	2.05	2.4	30	120
	AllnGaP	Super Red		630	1.8	2.4	80	120
L-S115LBKFCT	InGaN	Blue	Water Clear	470	2.8	3.5	80	120
	AllnGaP	Super Amber		605	1.8	2.5	80	120

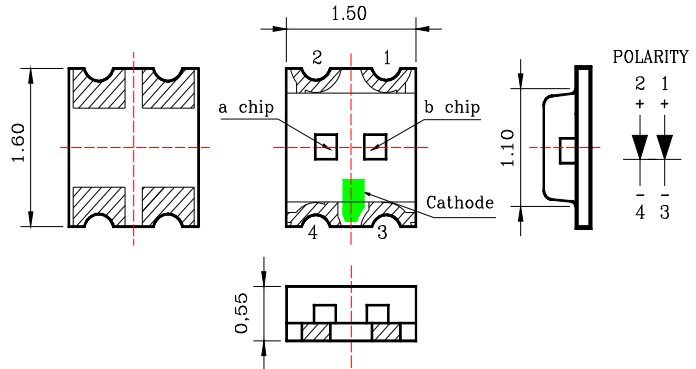
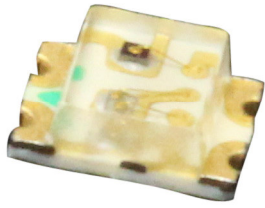
L-S115XXXXXX -3.2x1.0x1.5mm SURFACE MOUNT DEVICE LED (1204)



Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-S115KRLBCT-5A	AllnGaP	Super Red	Water Clear	630	1.8	2.4	20	120
	InGaN	Blue		470	3	3.5	30	120
L-S115GFWT	GaP	Yellow Green	White Diffused	570	2.1	2.6	12.5	120
	GaAsP	Super Amber		605	2	2.6	6	120

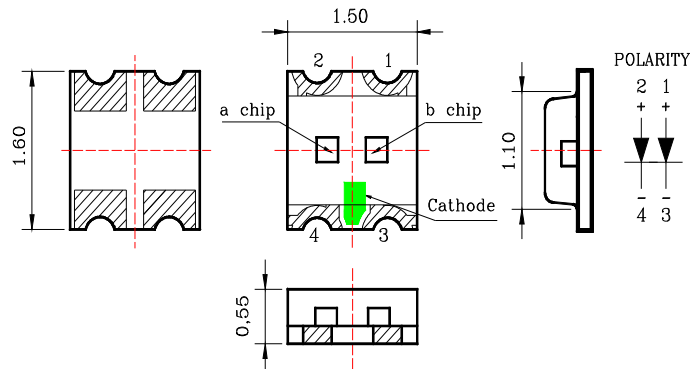
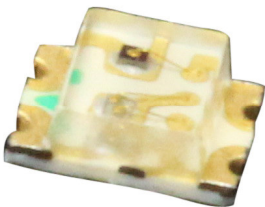
L-C195XXXXXX -1.6x1.5x0.55mm SURFACE MOUNT DEVICE LED (0605)

SMD / IRM



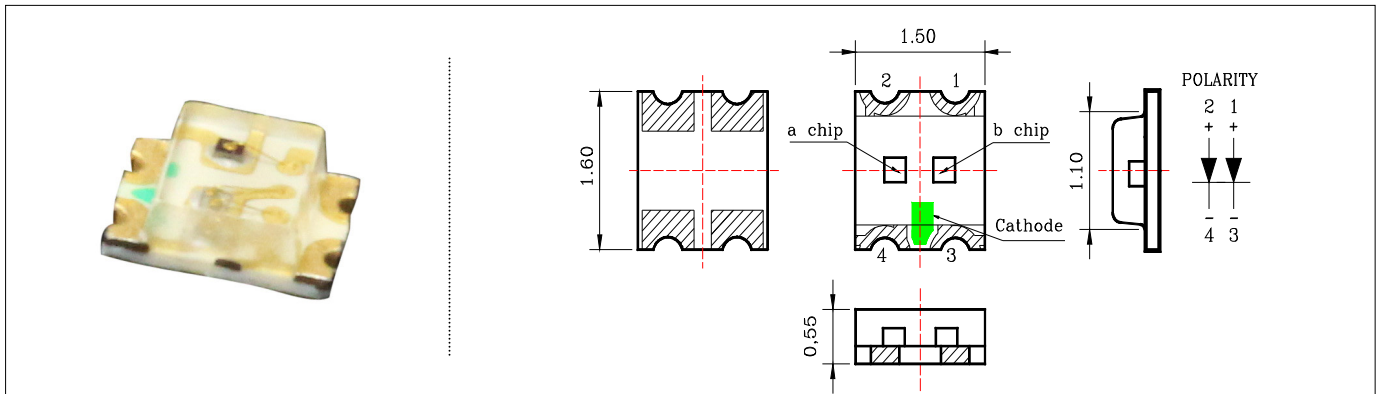
Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-C195KGJRCT	AllnGaP	Super Yellow Green	Water Clear	570	2.05	2.4	35	130
	AllnGaP	Super Red		630	2.0	2.4	45	
L-C195TBJRCT	InGaN	Blue	Water Clear	470	3	3.5	80	130
	AllnGaP	Super Red		630	1.8	2.4	80	

L-C195XXXXXX -1.6x1.5x0.55mm SURFACE MOUNT DEVICE LED (0605)



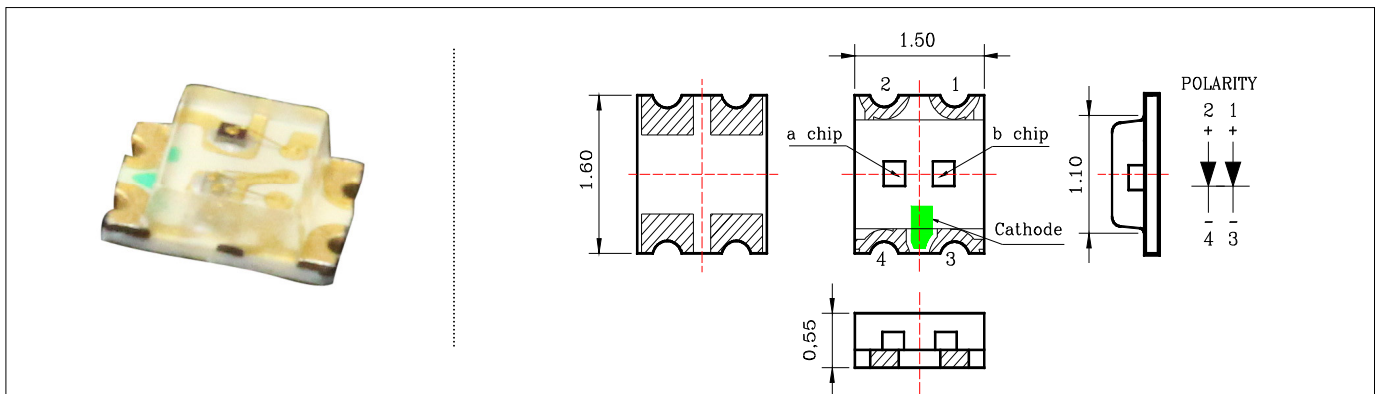
Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-C195KGJYCT	AllnGaP	Super Yellow Green	Water Clear	570	2.0	2.4	35	130
	AllnGaP	Super Yellow		590	2.0	2.4	75	
L-C195TBKYCT-5A	InGaN	Blue	Water Clear	470	2.9	3.1	25	130
	AllnGaP	Super Yellow		590	1.9	2.2	30	

L-C195XXXXXX -1.6x1.5x0.55mm SURFACE MOUNT DEVICE LED (0605)



Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-C195TBKFACT	InGaN	Blue	Water Clear	470	2.9	3.5	45	130
	AllnGaP	Super Amber		605	1.8	2.4	90	130
L-C195LBLGCT-LT-U1	InGaN	Blue	Water Clear	470	3.2	3.5	50	130
	InGaN	Ultra Green		525	3.2	3.5	180	130

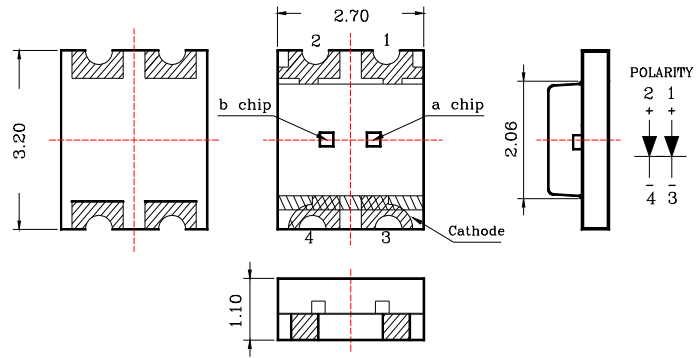
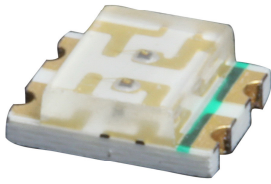
L-C195XXXXXX -1.6x1.5x0.55mm SURFACE MOUNT DEVICE LED (0605)



Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-C195KFWDT-5A	AllnGaP	Super Amber	Water Clear	605	2.0	2.4	50	130
	InGaN	Cool White		X:0.3 Y:0.3	2.75	3.15	130	130

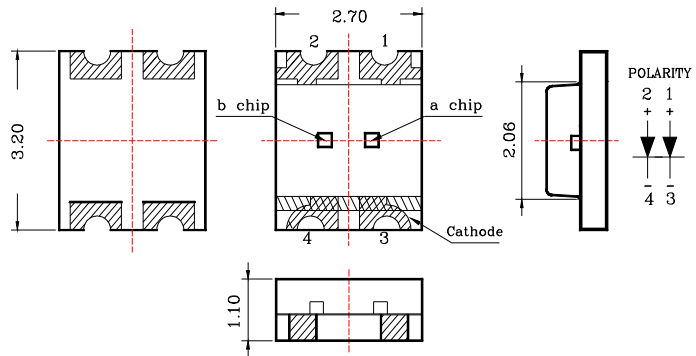
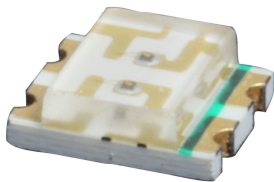
L-C155XXXXXX -3.2x2.7x1.1mm SURFACE MOUNT DEVICE LED (1210)

SMD / IRM



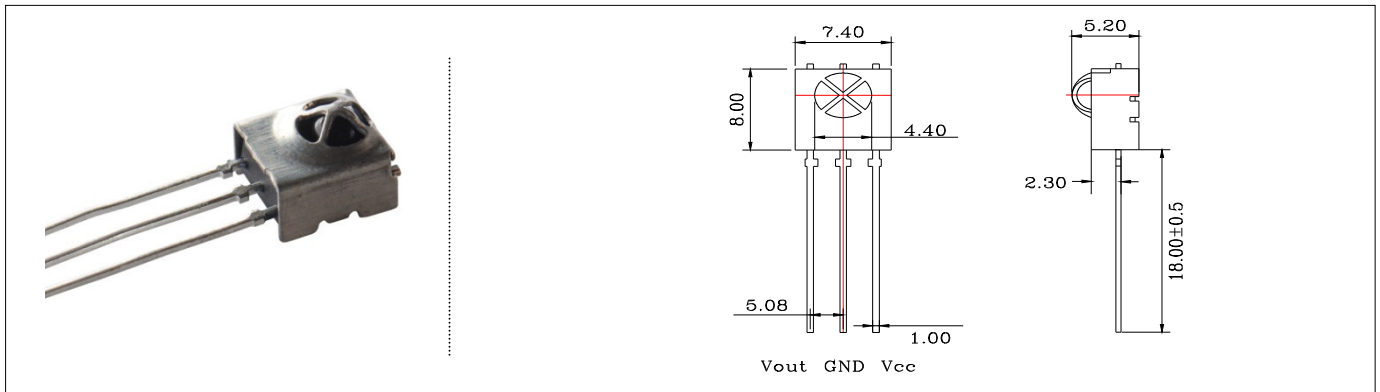
Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-C155KGJRCT	AllnGaP	Super Yellow Green	Water Clear	570	2.0	2.4	35	130
	AllnGaP	Super Red		630	2.0	2.4	45	
L-C155KGJYCT	AllnGaP	Super Yellow Green	Water Clear	570	2.0	2.4	35	130
	AllnGaP	Super Yellow		590	2.0	2.4	75	
L-C155TBJRCT	InGaP	Blue	Water Clear	470	3.1	3.5	80	130
	AllnGaP	Super Red		630	2.0	2.4	80	

L-C155XXXXXX -3.2x2.7x1.1mm SURFACE MOUNT DEVICE LED (1210)



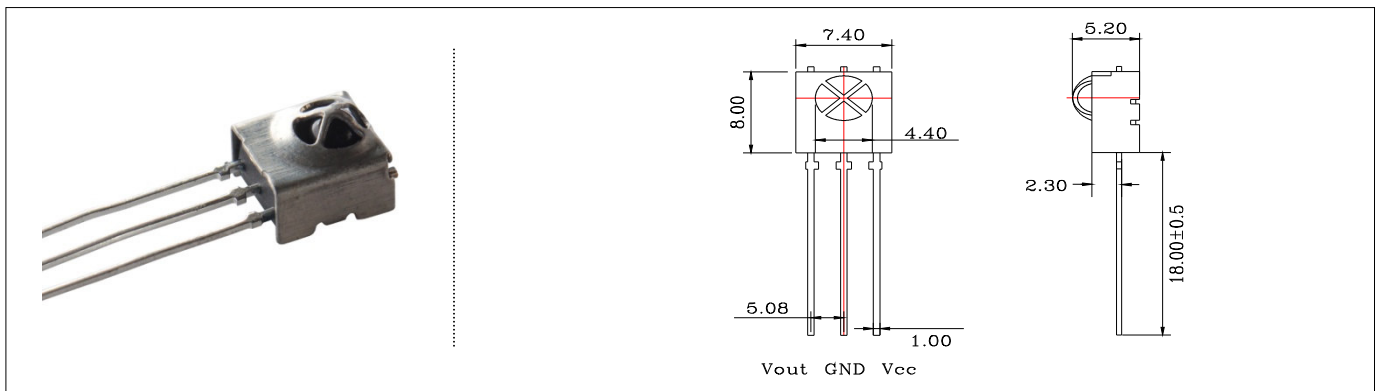
Part No.	Chip		Lens Color	Wave length λ_D (nm)	Electro-optical characteristics			View Angle (deg.)
	Raw Material	Emitted Color			VF(V)20mA		IV(mcd)20mA	
					Typ.	Max.	Typ.	
L-C155KGKFCT	AllnGaP	Super Yellow Green	Water Clear	570	2.0		35	130
	AllnGaP	Super Amber		605	2.0		80	
L-C195TBJSCT-5A	InGaP	Blue	Water Clear	470	3.1	3.5		130
	AllnGaP	Super Yellow		590	2.0	2.4		

PL-IRMXXXXFX/XLXXXX -INFRARED RECEIVER MODULE IRM



Part No.	Electro-optical characteristics																
	Vcc(V)		Icc(Ma)	Wave length λ_P (nm)	Fo(KHz)	L(m)			Voh(V)			Vol(V)		Twh(us)		Twl(us)	
	Min.	Max.	Max.			0°	30°	45°	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.		
PL-IRM1261-C438	2.4	5.5	2.5	940	38	16	/	8	2.4	0.1	0.5	600	800	600	800		
PL-IRM1261-F438	2.4	5.5	2.5	940	38	5	/	/	2.4	0.1	0.5	600	800	600	800		
PL-IRM1261-C440	2.4	5.5	2.5	940	40	16	9	/	2.4	0.1	0.5	600	800	600	800		
PL-IRM1261-C456	2.4	5.5	2.5	940	56	16	9	/	2.4	0.1	0.5	600	800	600	800		

PL-IRMXXXXFX/XLXXXX -INFRARED RECEIVER MODULE IRM



Part No.	Electro-optical characteristics														
	Vcc(V)		Icc(Ma)	Wave length λ_P (nm)	Fo(KHz)	L(m)			Voh(V)			Twh(us)		Twl(us)	
	Min.	Max.	Max.			0°	30°	45°	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.
PL-IRM1261-C438-8	2.4	5.5	2.5	940	38	16	9	/	2.4	0.1	0.5	600	800	600	800
PL-IRM1261-C438-03	2.4	5.5	2.5	940	38	16	9	/	2.4	0.1	0.5	600	800	600	800
PL-IRM12A1-C438	2.7	5.5	2.5	940	38	16	9	/	2.7	0.1	0.5	600	800	600	800
PL-IRM0101-3	4.5	5	2.5	940	38	35	9	/	4.5	0.1	0.5	600	800	600	800