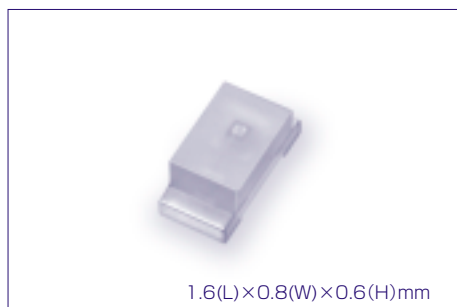


CL-191 Series

Mono-Color Upward-Lighting Type **CL-191 Series**



● CL-190の厚み(0.8mm)をさらに薄くした小型チップLEDです。

● Compact chip LED even thinner than CL-190 (0.8mm thick).

発光色のラインアップにつきましては、発注時にお問い合わせの上、ご確認ください。

Please contact us at the time of order for the lineup of luminescent colors.

●絶対最大定格 Absolute Maximum Rating

(Ta 25℃)

Product code	Pd (mW)	I _F (mA)	I _{FP} (mA)	V _R (V)	Top (℃)	Tst (℃)
CL-191 (UR,HRを除く) Except UR and HR	50	20	100※1	5	-25~+80	-30~+85
CL-191UR/HR	78	30				

※1 I_{FP}の条件はduty 1/10、パルス巾30msecです。

※1 Conditions for I_{FP} are pulse of 1/10 duty and 30msec width.

●電気的光学的特性 Electro-optical Characteristics

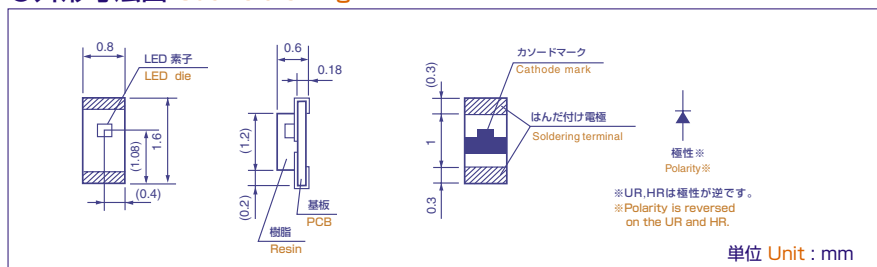
(Ta 25℃)

Product code	Color variation	V _F			λ _d typ (nm)	Δλ typ (nm)	I _V *		
		I _F (mA)	typ (V)	max (V)			I _F (mA)	min (mcd)	typ (mcd)
CL-191R	Red	20	2.2	2.6	645	100	20	0.5	1.3
CL-191D	Orange	20	2.2	2.6	600	40	20	2.4	7.1
CL-191Y	Yellow	20	2.1	2.6	589	40	20	2.6	6.4
CL-191YG	Yellow green	20	2.2	2.6	575	30	20	5	18
CL-191G	Green	20	2.2	2.6	570	26	20	2.5	10
CL-191FG	Fresh green	20	2.2	2.6	566	26	20	2.2	6.5
CL-191PG	Pure green	20	2.2	2.6	559	24	20	1	3
CL-191SR	Super brightness red	20	2	2.6	640	40	20	1.5	4.3
CL-191SD	Super brightness orange	20	2	2.6	620	40	20	2	6.2
CL-191UR	Ultra brightness red	20	1.8	2.6	650	20	20	3.5	13
CL-191HR	High brightness red	20	1.8	2.6	640	20	20	5	23

※NIST規格に準拠

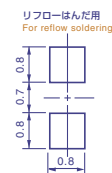
※Per NIST standards

●外形寸法図 Outline drawing



推奨はんだ付けパターン

The following soldering patterns are recommended for reflow-soldering:



■諸特性 Characteristics

