## **Kingbright**

# HEL colour

- Available in various industry standard SMD packages & sizes
- Perfect fit for applications with low power consumption and high efficiency needs
  - Engineered as a total comprehensive solution from the HELI product series
  - Designed for today's innovative hand-held devices & wearable products









#### **LED SOLUTION GUIDE**

High-brightness • Energy-efficient • Low-current • Illumination



























#### **BI-COLOR**

- Low Current/Low Vf requirementsBest for battery operated devices

- Generates wide range of mixed colorsSuitable for status indication & backlight

#### Flat Top • Low Current • Low VF

Dord Museula an		15 (***)	lv (mcd)		Viewing	Fig
Part Number	I <sub>F</sub>	λD (nm)	Min.	Тур.	Angle	Figure
APHB1608LCGKSURKC	2mA	<b>■</b> 570 / <b>■</b> 630	1.2 / 2	3/8	130°	
APHB1608LCGKSYKC	2mA	<b>570</b> / <b>590</b>	1.2 / 6	3 / 10	130°	
APHB1608LZGKSURKC	2mA	■ 525 / <b>■</b> 630	20 / 2	40 / 8	130°	
APHB1608LSYKSURKC	2mA	<b>■</b> 590 / <b>■</b> 630	6/2	10 / 8	130°	1
APHB1608LZGKSYKC	2mA	<b>525</b> / <b>590</b>	20 / 6	40 / 10	130°	
APHB1608LVBDZGKC	2mA	<b>470</b> / <b>525</b>	6 / 20	15 / 40	130°	
APHB1608LVBDSEKJ3C	2mA	<b>470</b> / <b>625</b>	6 / 20	15 / 40	130°	
APHBM2012LSURKCGKC	2mA	<b>■</b> 630 / <b>■</b> 570	6 / 1.2	15 / 2	120°	
APHBM2012LCGKSYKC	2mA	<b>570</b> / <b>590</b>	1.2 / 6	3 / 10	120°	
APHBM2012LSURKZGKC	2mA	<b>■</b> 630 / <b>■</b> 525	6 / 50	15 / 90	120°	
APHBM2012LSURKSYKC	2mA	<b>■</b> 630 / <b>■</b> 590	6/6	15 / 10	120°	
APHBM2012LQBDSURKC	2mA	■ 465 / ■ 630	6/6	12 / 15	120°	2
APHBM2012LZGKSYKC	2mA	■ 525 / ■ 590	50 / 6	90 / 10	120°	
APHBM2012LVBDZGKC	2mA	<b>470</b> / <b>525</b>	10 / 50	20 / 90	120°	
APHBM2012LVBDSEKJ3C	2mA	■ 470 / ■ 625	10 / 30	20 / 60	120°	
APHBM2012LVBDSYKJ3C	2mA	<b>470</b> / <b>590</b>	10 / 20	20 / 35	120°	
APTB1612LSURKCGKC	2mA	<b>■</b> 630 / <b>■</b> 570	4 / 1.2	9/3	150°	
APTB1612LSYKCGKC	2mA	<b>590</b> / <b>570</b>	4 / 1.2	10 / 3	150°	3

#### **Dome Lens · Low Current · Low VF**

Part Number		λD (nm)	lv (mcd)		Viewing Angle	Figure
rait Nullibei	F	۸D (۱۱۱۱۱)	Min.	Тур.	Viewing Angle	rigule
APBD3224LSURKCGKC	2mA	<b>■</b> 630 / <b>■</b> 570	10 / 10	30 / 30	20°	
APBD3224LSYKCGKC	2mA	<b>590</b> / <b>570</b>	10 / 10	35 / 30	20°	
APBD3224LSURKZGKC	2mA	<b>■</b> 630 / <b>■</b> 525	10 / 120	30 / 250	20°	
APBD3224LSURKSYKC	2mA	<b>■</b> 630 / <b>■</b> 590	10 / 20	30 / 50	20°	4
APBD3224LQBDCGKC	2mA	<b>465</b> / <b>570</b>	12 / 10	30 / 30	20°	
APBD3224LSURKQBDC	2mA	<b>630</b> / <b>465</b>	10 / 20	30 / 40	20°	
APBD3224LZGKSYKC	2mA	<b>525</b> / <b>590</b>	50 / 20	150 / 50	20°	













#### **TRI-COLOR**

- Available in top-emitting and side-firingLow Current/ Low Vf requirements

- Available in different footprintsDisplay multiple statuses in one LED

#### **Low Current • Low VF**

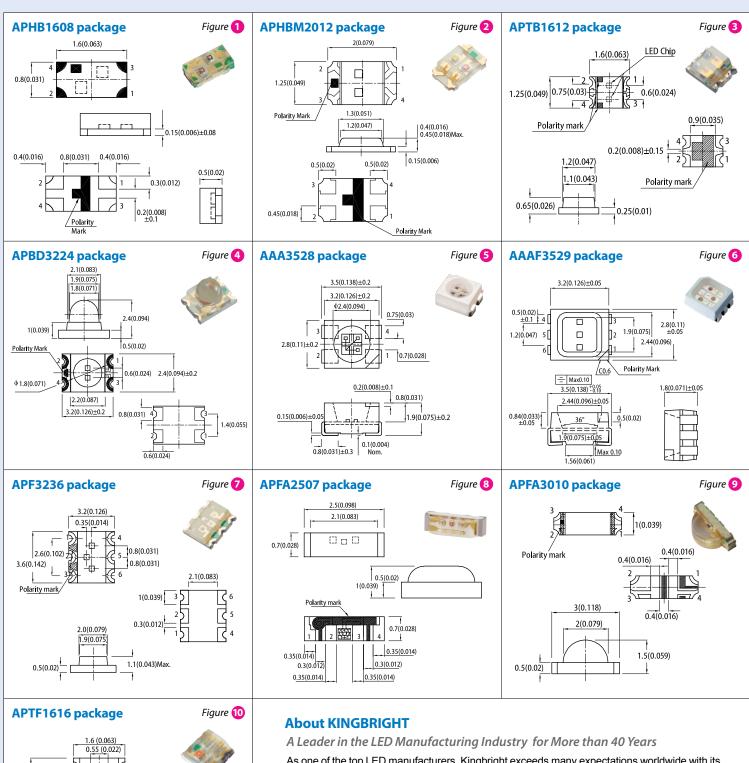
lv (mcd)							
Part Number		λD (nm)			Viewing Angle	e Figure	
			Min.	Тур.	, i		
AAA3528LSEEZGKQBKS	2mA	<b>■</b> 621 / <b>■</b> 525 / <b>■</b> 465	10 / 80 / 12	20 / 180 / 30	120°	-	
AAA3528LSEKJ3ZGKQBKS	2mA	<b>■</b> 625 / <b>■</b> 525 / <b>■</b> 465	30 / 80 / 12	60 / 180 / 30	120°	5	
AAAF3529LSEEZGKQBKS	2mA	<b>■</b> 621 / <b>■</b> 525 / <b>■</b> 465	10 / 80 / 12	20 / 180 / 30	130°		
AAAF3529LSEKJ3ZGKQBS	2mA	■ 625 / ■ 525 / ■ 465	30 / 80 / 12	60 / 180 / 30	130°	6	
APF3236LSEEZGKQBKC	2mA	<b>■</b> 621 / <b>■</b> 525 / <b>■</b> 465	6 / 20 / 4	15 / 60 / 10	150°	7	
APFA2507LQBDSEEZGKC	2mA	■ 465 / ■ 621 / ■ 525	4/6/20	10 / 10 / 60	130°	8	
APFA3010LSEEZGKQBKC	2mA	<b>■</b> 621 / <b>■</b> 525 / <b>■</b> 465	6 / 20 / 4	15 / 60 / 10	150°	9	
APFA3010LSEKJ3ZGKQBC	2mA	■ 625 / ■ 525 / ■ 465	20 / 20 / 4	40 / 60 /10	150°	Э	
APTF1616LSEKJ3ZGKQBC	2mA	■ 625 / ■ 525 / ■ 465	20 / 20 / 6	40 / 50 / 14	130°	10	
APTF1616LSEEZGKQBKC	2mA	<b>■</b> 621 / <b>■</b> 525 / <b>■</b> 465	6 / 20 / 6	15 / 50 / 14	130°	10	

#### **Top Emitting**

Part Number Ι <sub>Ε</sub> λί		λD (nm)	Iv (mcd)		Viewing Angle	Figure
r alt Nullibel	1 <sub>F</sub>	AD (IIIII)	Min. Typ.	Viewing Angle	e rigure	
AAA3528SEEZGGVBDS	20mA	<b>■</b> 621 / <b>■</b> 525 / <b>■</b> 470	120 / 1000 / 200	220 / 1600 / 330	120°	
AAA3528SEEZGKQBKS	20mA	■ 621 / ■ 525 / ■ 465	120 / 400 / 55	220 / 500 / 100	120°	5
AAA3528SEKJ3ZGKQBKS	20mA	■ 625 / ■ 525 / ■ 465	400 / 400 / 80	500 / 600 / 200	120°	
AAAF3529SEEZGKQBKS	20mA	■ 621 / ■ 525 / ■ 465	80 / 400 / 80	180 / 580 / 130	130°	6
APF3236SEEZGKQBKC	20mA	<b>■</b> 621 / <b>■</b> 525 / <b>■</b> 465	80 / 200 / 40	140 / 330 / 70	150°	7
APTF1616SEEZGKQBKC	20mA	■ 621 / ■ 525 / ■ 465	55 / 120 / 40	110 / 280 / 70	130°	10
APTF1616SEKJ3ZGKQBKC	20mA	■ 625 / ■ 525 / ■ 465	200 / 120 / 40	350 / 280 / 70	130°	10

### **Side Emitting**

Part Number		)D (nm)	Iv (mcd)		Viewing Angle	Figure
Fait Number	Part Number I <sub>F</sub> λD (nm)		Min.	Тур.		
APFA2507QBDSEEZGKC	20mA	■ 465 / ■ 621 / ■ 525	40 / 80 / 300	65 / 110 / 500	130°	8
APFA3010SEEZGKQBKC	20mA	■ 621 / ■ 525 / ■ 465	80 / 300 / 40	140 / 500 / 70	150°	
APFA3010SEKJ3ZGKQBKC	20mA	<b>■</b> 625 / <b>■</b> 525 / <b>■</b> 465	200 / 300 / 40	410 / 500 / 70	150°	9



#### 1.6 (0.063) 0.55 (0.022) 0.85 (0.033) 1.6 (0.063) 1.6 (0.063) 1.6 (0.063) 1.6 (0.063) 1.6 (0.063) 1.6 (0.063) 1.6 (0.063) 1.7 (0.026) 1.7 (0.047) 1.1 (0.047) 1.1 (0.047) 1.1 (0.043) 1.2 (0.047) 1.3 (0.047)

As one of the top LED manufacturers, Kingbright exceeds many expectations worldwide with its unsurpassed manufacturing capabilities. We are deeply ingrained in the pursuit of excellence, manufacturing the most comprehensive, reliable and highest quality LEDs in both visible and invisible spectrums to meet various engineering needs in all industries for customers around the globe. It is our core mission to achieve innovation through investing in R&D and to develop high efficiency LEDs with the latest standards. Our factory in China is accredited with IATF16949, ISO9001, ISO14001 certifications and all of our parts are in compliance with the latest RoHS and REACH Directive. To learn more about our products, please visit us at KingbrightUSA.com.

## **Kingbright**







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