



Kingbright

# LUMINARY SOLUTIONS

LED Guide for AI Applications

## 0201 SMD LEDs

- Industry's smallest SMD LED – 0201 footprint
- 0.65 x 0.35 x 0.20mm (LxWxH)
- Highly compatible with automatic placement equipment

Part Number	Color	Wavelength/ X-Y Coordinates	Iv (mcd)		IF	Viewing Angle	Dimensions
			Min.	Typ.			
APG0603VBC-A1-5MAV	<span style="color:blue">■</span>	468nm	30	60	5mA	140°	
APG0603VWF-A1-5MAV	<span style="color:white">■</span>	X=0.31, Y=0.31	180	320	5mA	140°	
APG0603ZGC-5MAV	<span style="color:green">■</span>	525nm	180	280	5mA	140°	
APG0603CGC-TT	<span style="color:yellow">■</span>	571nm	6	15	10mA	140°	
APG0603SEC-E-TT	<span style="color:red">■</span>	624nm	15	40	10mA	140°	
APG0603SEC-TT	<span style="color:orange">■</span>	605nm	20	50	10mA	140°	
APG0603SURC-TT	<span style="color:red">■</span>	631nm	10	35	10mA	140°	
APG0603SYC-TT	<span style="color:yellow">■</span>	589nm	10	30	10mA	140°	

## 0402 SMD LEDs

- Industry standard 0402 SMD LED packages
- 0402 with 0.5mm thickness sorted at 2mA
- 2nd Gen 0402 with 0.2mm thickness sorted at 5mA
- Low power consumption with exceptional outputs

Part Number	Color	Wavelength/ X-Y Coordinates	Iv (mcd)		IF	Viewing Angle	Dimensions
			Min.	Typ.			
APHHS1005LCGCK	<span style="color:yellow">■</span>	570nm	1.2	3.5	2mA	120°	
APHHS1005LQBC/D-V	<span style="color:blue">■</span>	465nm	6	15	2mA	140°	
APHHS1005LSECK/J3-PF	<span style="color:red">■</span>	625nm	15	35	2mA	120°	
APHHS1005LSECK/J4-PF	<span style="color:orange">■</span>	605nm	20	40	2mA	120°	
APHHS1005LQWF/D-V	<span style="color:white">■</span>	X=0.31, Y=0.31	15	30	2mA	160°	
APHHS1005LSYCK/J3-PF	<span style="color:yellow">■</span>	590nm	10	20	2mA	120°	
APHHS1005LZGCK-V	<span style="color:green">■</span>	525nm	80	180	2mA	140°	
APG1005VBC-A1-5MAV	<span style="color:blue">■</span>	468nm	20	60	5mA	140°	
APG1005VWF-A1-5MAV	<span style="color:white">■</span>	X=0.31, Y=0.31	180	310	5mA	160°	
APG1005ZGC-5MAV	<span style="color:green">■</span>	525nm	120	280	5mA	140°	

## 0603 SMD LEDs

- Industry standard 0603 SMD LED packages
- Top emitting, PLCC and dome lens options
- Dome lens features up to 3X more intensity
- 0603 top emitting with 0.75mm thickness
- 0603 dome lens with 0.95mm thickness
- 0603 PLCC with 0.55mm thickness
- Sorted at 2mA with low VF and high intensity output
- Viewing angle range from 60° to 120°

Part Number	Color	Wavelength	Iv (mcd)		IF	Viewing Angle	Dimensions
			Min.	Typ.			
APT1608LSECK/J3-PRV		625nm	20	40	2mA	120°	
APT1608LSECK/J4-PRV		605nm	30	50	2mA	120°	
APT1608LSYCK/J3-PRV		590nm	15	25	2mA	120°	
APT1608LVBC/D		470nm	15	24	2mA	130°	
APT1608LZGCK		525nm	50	100	2mA	130°	
APTD1608LSECK/J3-PF		625nm	50	120	2mA	60°	
APTD1608LSECK/J4-PF		605nm	80	150	2mA	60°	
APTD1608LSYCK/J3-PF		590nm	30	55	2mA	60°	
APTD1608LVBC/D		470nm	30	65	2mA	40°	
APTD1608LZGCK		525nm	250	420	2mA	60°	
AA1608LQBS/D-295V		465nm	15	25	2mA	120°	
AA1608LZGSK-295V		525nm	80	140	2mA	120°	
AA1608LVBS/A-295V		468nm	20	35	2mA	120°	
AA1608LCGSK		570nm	2	6	2mA	120°	
AA1608LSESK		605nm	6	15	2mA	120°	
AA1608LSYSK		590nm	6	12	2mA	120°	
AA1608LSURSK		630nm	6	12	2mA	120°	

## Right Angle single color SMD LEDs

- Right angle dome lens SMD LED
- Extreme small viewing angle of 10°
- 3.0 x 2.0 x 2.8 mm (LxWxH)
- Tinned pads for improved solderability

Part Number	Color	Wavelength	Iv (mcd)		IF	Viewing Angle	Dimensions
			Min.	Typ.			
APDA3020LSECK/J3-PF	Red	625nm	250	500	2mA	10°	
APDA3020LSECK/J4-PF	Orange	605nm	550	1000	2mA	10°	
APDA3020LSYCK/J3-PF	Yellow	590nm	180	500	2mA	10°	
APDA3020LVBC/D	Blue	470nm	80	150	2mA	10°	
APDA3020LZGCK	Green	525nm	700	1500	2mA	10°	



## Full Color SMD LEDs

- Enhanced RGB SMD LEDs
- Sorted at 2mA with low VF
- Packages with each color can be controlled separately
- VF max at 3.1V for green, blue and 2.1V for red and yellow colors
- Features in various industry standard packages - PLCC-4, top emitting and right angle packages in various sizes

Part Number	Color	Wavelength	Iv (mcd)		IF	Viewing Angle	Dimensions
			Min.	Typ.			
APHF1608LSEEQBDZGKC	Red	621nm	4	15	2mA	140°	
	Blue	465nm	4	10			
	Green	525nm	5	90			

## Full Color SMD LEDs

Part Number	Color	Wavelength	Iv (mcd)		I <sub>F</sub>	Viewing Angle	Dimensions
			Min.	Typ.			
APTF1616LSEEZGKBKC	Red	621nm	6	15	2mA	130°	
	Green	525nm	30	80			
	Blue	465nm	6	14			
APTF1616LSEKJ3ZGKBKC	Red	625nm	20	40	2mA	130°	
	Green	525nm	30	80			
	Blue	465nm	6	14			
APF3236LSEEZGKBKC	Red	621nm	6	15	2mA	150°	
	Green	525nm	20	60			
	Blue	465nm	4	10			
APFA2507LQBDSEEZGKC	Blue	465nm	4	10	2mA	130°	
	Red	621nm	6	10			
	Green	525nm	50	90			
APFA3010LSEKJ3ZGKBKC	Red	625nm	20	40	2mA	150°	
	Green	525nm	20	60			
	Blue	465nm	4	10			

## Full Color SMD LEDs

Part Number	Color	Wavelength	Iv (mcd)		I F	Viewing Angle	Dimensions
			Min.	Typ.			
AAA3528LSEEZGQBKS	Red	621nm	10	20	2mA	120°	
	Green	525nm	80	180			
	Blue	465nm	12	30			
AAA3528LSEKJ3ZGQBKS	Red	625nm	30	60	2mA	120°	
	Green	525nm	80	180			
	Blue	465nm	12	30			
AAAF3529LSEEZGQBKS	Red	621nm	10	20	2mA	130°	
	Green	525nm	80	180			
	Blue	465nm	12	30			
AAAF3529LSEKJ3ZGQBKS	Red	625nm	30	60	2mA	130°	
	Green	525nm	80	180			
	Blue	465nm	12	30			

