

Kingbright

Optoelectronic Components



■ Quality ■ Efficiency ■ Service ■ Innovation

2014-2015



SMD LED

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Description

Kingbright offers an extensive selection of compact size and high-efficient SMD LEDs to fulfill demands of various surface-mount requirements. SMD LED packages are available in popular PLCC, chip type, and subminiature with different feature options in size, shape, viewing angle, color combination, and mounting type.

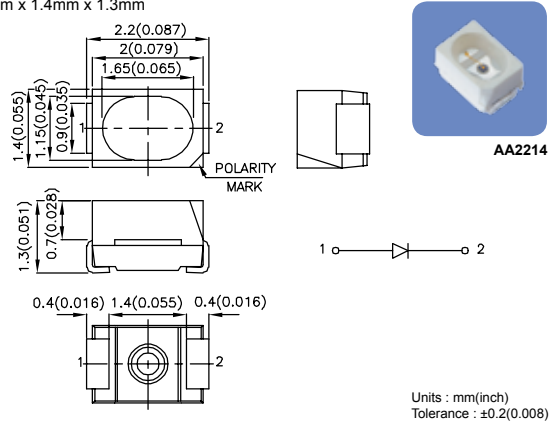
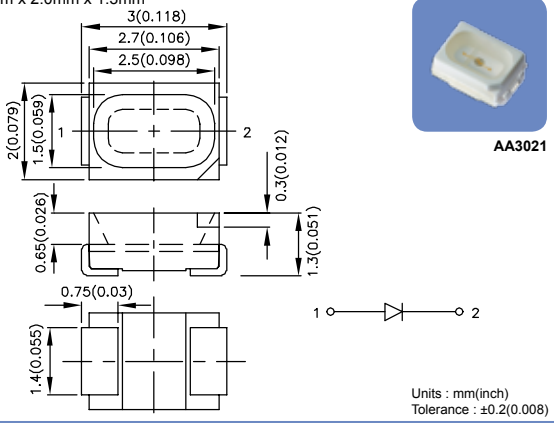
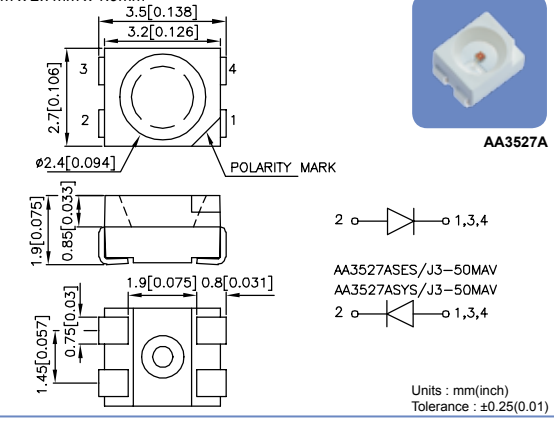
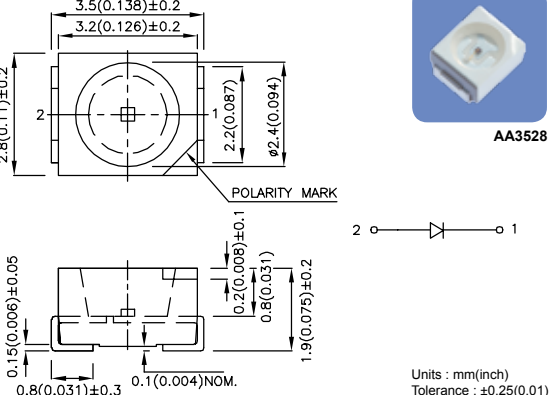
Kingbright SMD LEDs are packaged in automation-friendly tape-and-reel to increase productivity and reduce assembly cost.

Features and Benefits

- PLCC, chip type and subminiature options.
- Compact size including industry standard foot-prints 0402, 0603, 0805, 1206, and many other options.
- Packages with different viewing angle options of 15 degree to 130 degree for different design needs.
- Colors are available in blue, green, yellow, orange, red, and others.
- Mounting options including top-mount, right angle mount and reversed-mount.
- Capable of single-color, bi-color, tri-color combinations.
- Automation-friendly tape-and-reel package to increase productivity and reduce assembly cost.
- High reliability with competitive lead time.


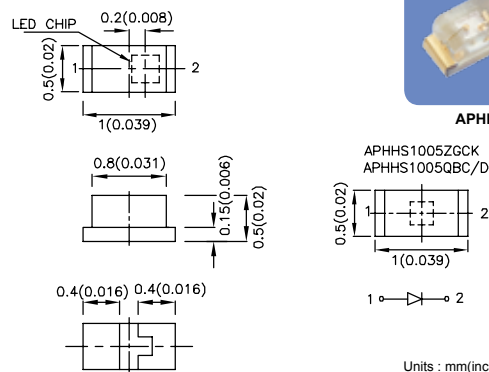

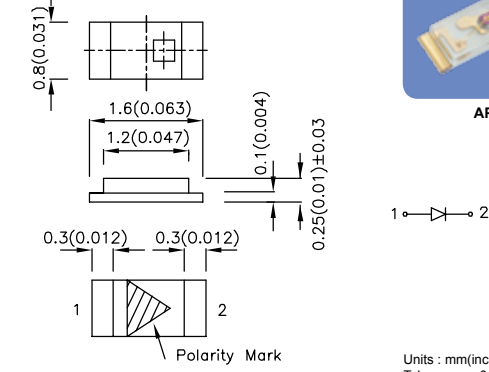

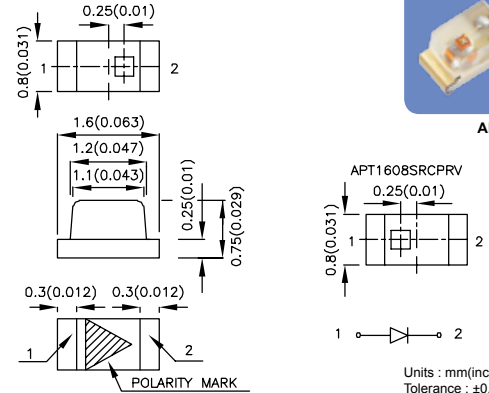

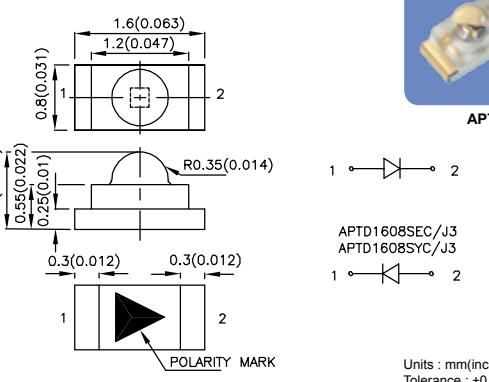


TOP-EMITTING PLCC SMD LED

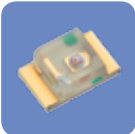
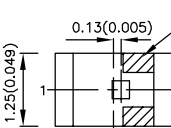
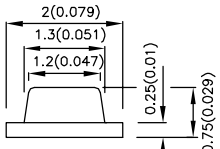
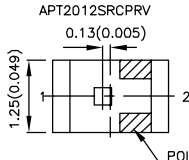

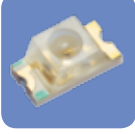
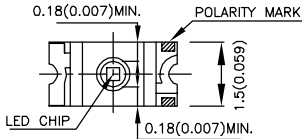
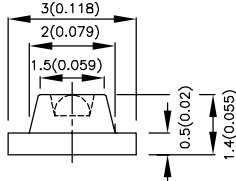
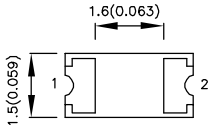
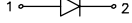
Part Number	Material	λD (nm)	Lens Type	Iv (mcd) @20mA*30mA**50mA		Viewing Angle 2θ1/2	Dimensions
				Min.	Typ.		
AA2214SURSK	AlGaInP	630	Water Clear	55	100	120°	<p>2.2mm x 1.4mm x 1.3mm</p>  <p>Units: mm(inch) Tolerance: ±0.2(0.008)</p>
AA2214SESK	AlGaInP	601	Water Clear	80	180	120°	
AA2214SYSK	AlGaInP	590	Water Clear	120	250	120°	
AA2214CGSK	AlGaInP	570	Water Clear	40	70	120°	
AA2214ZGS	InGaN	525	Water Clear	400	700	120°	
AA2214QBS/D	InGaN	465	Water Clear	80	150	120°	
AA3021ES	GaAsP/GaP	617	Water Clear	8	18	125°	<p>3.0mm x 2.0mm x 1.3mm</p>  <p>Units: mm(inch) Tolerance: ±0.2(0.008)</p>
AA3021SURSK	AlGaInP	630	Water Clear	40	90	125°	
AA3021SESK	AlGaInP	601	Water Clear	120	300	125°	
AA3021YS	GaAsP/GaP	588	Water Clear	8	15	125°	
AA3021SYSK	AlGaInP	590	Water Clear	120	200	125°	
AA3021SGS	GaP	568	Water Clear	12	20	125°	
AA3021CGSK	AlGaInP	570	Water Clear	40	80	125°	<p>3.5mm x 2.7mm x 1.9mm</p>  <p>Units: mm(inch) Tolerance: ±0.2(0.001)</p>
AA3527ASURS-50MAV	AlGaInP	630	Water Clear	**120	**280	120°	
AA3527ASES/J3-50MAV	AlGaInP	625	Water Clear	**1000	**1600	120°	
AA3527ASES-50MAV	AlGaInP	601	Water Clear	**300	**500	120°	
AA3527ASYS/J3-50MAV	AlGaInP	590	Water Clear	**1000	**1600	120°	
AA3527AZGS-30MAV	InGaN	525	Water Clear	*500	*750	120°	
AA3527AVBS/D-30MAV	InGaN	470	Water Clear	*300	*600	120°	
AA3528EC	GaAsP/GaP	617	Water Clear	8	12	120°	<p>3.5mm x 2.8mm x 1.9mm</p>  <p>Units: mm(inch) Tolerance: ±0.25(0.01)</p>
AA3528SURCK	AlGaInP	630	Water Clear	55	100	120°	
AA3528SECK	AlGaInP	601	Water Clear	120	230	120°	
AA3528YC	GaAsP/GaP	588	Water Clear	8	15	120°	
AA3528SYCK	AlGaInP	590	Water Clear	80	200	120°	
AA3528SGC	GaP	568	Water Clear	12	25	120°	
AA3528CGCK	AlGaInP	570	Water Clear	40	100	120°	
AA3528ZGCK	InGaN	525	Water Clear	300	500	120°	
AA3528QBS/D	InGaN	465	Water Clear	80	150	120°	
AA3528VBS/D	InGaN	470	Water Clear	300	450	120°	

TOP-EMITTING CHIP SMD LED

SMD LED ■ TOP-EMITTING CHIP SMD LED

Part Number	Material	λD (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 2θ1/2	Dimensions	
				Min.	Typ.			
APHHS1005SURCK	AlGaInP	630	Water Clear	40	70	120°	<p>1.0mm x 0.5mm x 0.5mm (0402)</p>  <p>APHHS1005</p> <p>APHHS1005ZGCK APHHS1005QBC/D</p>  <p>Units: mm(inch) Tolerance: ±0.1(0.004)</p>	
APHHS1005SECK	AlGaInP	601	Water Clear	80	150	120°		
APHHS1005SYCK	AlGaInP	590	Water Clear	80	150	120°		
APHHS1005CGCK	AlGaInP	570	Water Clear	20	50	120°		
APHHS1005ZGCK	InGaN	525	Water Clear	200	400	120°		
APHHS1005QBC/D	InGaN	465	Water Clear	40	60	120°		
APG1608SURKC/T	AlGaInP	630	Water Clear	55	110	120°	<p>1.6mm x 0.8mm x 0.25mm (0603)</p>  <p>APG1608</p>  <p>Units: mm(inch) Tolerance: ±0.1(0.004)</p>	
APG1608SEKC/T	AlGaInP	601	Water Clear	55	100	120°		
APG1608SYKC/T	AlGaInP	590	Water Clear	55	120	120°		
APG1608CGKC/T	AlGaInP	570	Water Clear	20	50	120°		
APG1608ZGC	InGaN	525	Water Clear	200	400	120°		
APG1608QBC/D	InGaN	465	Water Clear	40	100	120°		
APT1608EC	GaAsP/GaP	617	Water Clear	3	8	120°	<p>1.6mm x 0.8mm x 0.75mm (0603)</p>  <p>APT1608</p> <p>APT1608SRCPRV</p>  <p>Units: mm(inch) Tolerance: ±0.1(0.004)</p>	
APT1608SRCPRV	GaAlAs	640	Water Clear	12	30	120°		
APT1608SURCK	AlGaInP	630	Water Clear	40	80	120°		
APT1608SECK	AlGaInP	601	Water Clear	80	180	120°		
APT1608YC	GaAsP/GaP	588	Water Clear	3	8	120°		
APT1608SYCK	AlGaInP	590	Water Clear	80	150	120°		
APT1608SGC	GaP	568	Water Clear	5	12	120°		
APT1608CGCK	AlGaInP	570	Water Clear	20	50	120°		
APT1608ZGCK	InGaN	525	Water Clear	200	350	120°		
APT1608QBC/D	InGaN	465	Water Clear	40	100	120°		
APT1608VBC/D	InGaN	470	Water Clear	120	180	120°		
APTD1608SURCK	AlGaInP	630	Water Clear	80	250	60°		<p>1.6mm x 0.8mm x 0.95mm (0603 Dome Lens)</p>  <p>APTD1608</p>  <p>Units: mm(inch) Tolerance: ±0.15(0.006)</p>
APTD1608SEC/J3	AlGaInP	625	Water Clear	500	900	60°		
APTD1608SECK	AlGaInP	601	Water Clear	200	500	60°		
APTD1608SYCK	AlGaInP	590	Water Clear	200	450	60°		
APTD1608SYC/J3	AlGaInP	590	Water Clear	500	900	60°		
APTD1608CGCK	AlGaInP	570	Water Clear	80	190	60°		
APTD1608ZGC	InGaN	525	Water Clear	500	1000	60°		
APTD1608QBC/D	InGaN	465	Water Clear	80	200	40°		


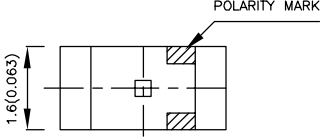
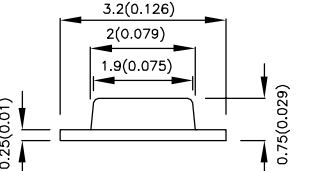
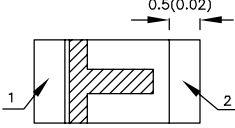
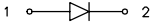
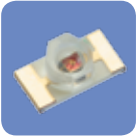
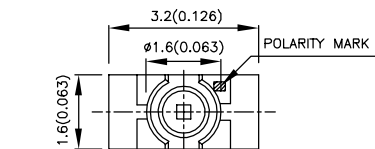
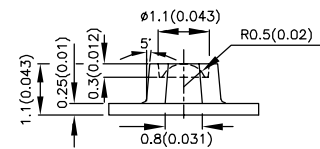
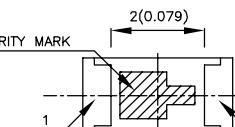
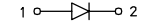

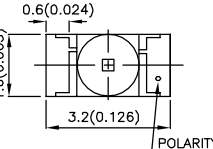
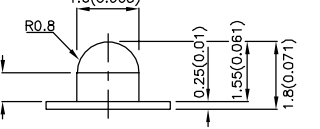
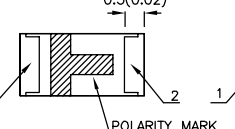
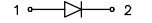
TOP-EMITTING CHIP SMD LED

Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle	Dimensions
				Min.	Typ.		
APT2012EC	GaAsP/GaP	617	Water Clear	3	8	120°	<p>2.0mm x 1.25mm x 0.75mm (0805)</p>  <p>APT2012</p>     <p>Units : mm(inch) Tolerance : ±0.1(0.004)</p>
APT2012SRCPRV	GaAlAs	640	Water Clear	12	30	120°	
APT2012SURCK	AlGaInP	630	Water Clear	40	80	120°	
APT2012SECK	AlGaInP	601	Water Clear	80	180	120°	
APT2012YC	GaAsP/GaP	588	Water Clear	3	8	120°	
APT2012SYCK	AlGaInP	590	Water Clear	80	150	120°	
APT2012SGC	GaP	568	Water Clear	5	12	120°	
APT2012CGCK	AlGaInP	570	Water Clear	20	50	120°	
APT2012ZGCK	InGaN	525	Water Clear	200	350	120°	
APT2012QBC/D	InGaN	465	Water Clear	40	100	120°	
APT2012VBC/D	InGaN	470	Water Clear	120	180	120°	
APHCM2012SURCK-F01	AlGaInP	630	Water Clear	40	80	110°	
APHCM2012SECK-F01	AlGaInP	601	Water Clear	80	180	110°	
APHCM2012SYCK-F01	AlGaInP	590	Water Clear	80	150	110°	
APHCM2012CGCK-F01	AlGaInP	570	Water Clear	20	50	110°	
APHCM2012ZGC-F01	InGaN	525	Water Clear	200	400	110°	
APHCM2012QBC/D-F01	InGaN	465	Water Clear	40	100	110°	
APL3015EC-F01	GaAsP/GaP	617	Water Clear	5	12	70°	<p>3.0mm x 1.5mm x 1.4mm (1106)</p>  <p>APL3015</p>     <p>Units : mm(inch) Tolerance : ±0.2(0.008)</p>
APL3015SRCPRV-F01	GaAlAs	640	Water Clear	20	50	70°	
APL3015SURCK-F01	AlGaInP	630	Water Clear	120	180	70°	
APL3015SECK-F01	AlGaInP	601	Water Clear	120	350	70°	
APL3015SYCK-F01	AlGaInP	590	Water Clear	200	350	70°	
APL3015SGC-F01	GaP	568	Water Clear	8	18	70°	
APL3015CGCK-F01	AlGaInP	570	Water Clear	55	120	70°	
APL3015ZGC-F01	InGaN	525	Water Clear	500	800	70°	
APL3015QBC/D-F01	InGaN	465	Water Clear	120	200	70°	

NOTE: AP series custom-made is available upon request.

TOP-EMITTING CHIP SMD LED

SMD LED ■ TOP-EMITTING CHIP SMD LED

Part Number	Material	λD (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 2θ1/2	Dimensions
				Min.	Typ.		
APT3216EC	GaAsP/GaP	● 617	Water Clear	3	8	120°	3.2mm x 1.6mm x 0.75mm (1206)  APT3216     Units : mm(inch) Tolerance : ±0.2(0.008)
APT3216SRCPRV	GaAlAs	● 640	Water Clear	12	30	120°	
APT3216SURCK	AlGaInP	● 630	Water Clear	40	80	120°	
APT3216SECK	AlGaInP	● 601	Water Clear	80	180	120°	
APT3216YC	GaAsP/GaP	● 588	Water Clear	3	8	120°	
APT3216SYCK	AlGaInP	● 590	Water Clear	80	150	120°	
APT3216SGC	GaP	● 568	Water Clear	5	12	120°	
APT3216CGCK	AlGaInP	● 570	Water Clear	20	50	120°	
APT3216ZGCK	InGaN	● 525	Water Clear	200	350	120°	
APT3216QBC/D	InGaN	● 465	Water Clear	40	100	120°	
APT3216VBC/D	InGaN	● 470	Water Clear	120	180	120°	
APTL3216SURCK	AlGaInP	● 630	Water Clear	120	230	70°	3.2mm x 1.6mm x 1.1mm (1206)  APTL3216     Units : mm(inch) Tolerance : ±0.1(0.004)
APTL3216SECK	AlGaInP	● 601	Water Clear	200	350	70°	
APTL3216SYCK	AlGaInP	● 590	Water Clear	200	350	70°	
APTL3216CGCK	AlGaInP	● 570	Water Clear	55	100	70°	
APTL3216ZGC	InGaN	● 525	Water Clear	500	1100	70°	
APTL3216QBC/D	InGaN	● 465	Water Clear	80	250	70°	
APTD3216EC	GaAsP/GaP	● 617	Water Clear	20	50	35°	3.2mm x 1.6mm x 1.8mm (1206 Dome Lens)  APTD3216     Units : mm(inch) Tolerance : ±0.2(0.008)
APTD3216SRCPRV	GaAlAs	● 640	Water Clear	80	150	35°	
APTD3216SURCK	AlGaInP	● 630	Water Clear	300	800	35°	
APTD3216SECK	AlGaInP	● 601	Water Clear	500	1000	35°	
APTD3216YC	GaAsP/GaP	● 588	Water Clear	20	40	35°	
APTD3216SYCK	AlGaInP	● 590	Water Clear	700	800	35°	
APTD3216SGC	GaP	● 568	Water Clear	20	50	35°	
APTD3216CGCK	AlGaInP	● 570	Water Clear	120	300	35°	
APTD3216ZGC	InGaN	● 525	Water Clear	1300	2300	35°	
APTD3216QBC/D	InGaN	● 465	Water Clear	300	700	35°	

TOP-EMITTING CHIP SMD LED


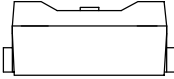
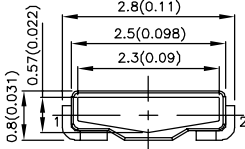
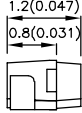


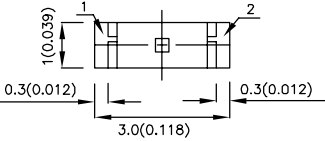
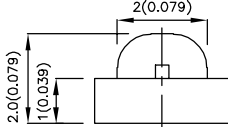
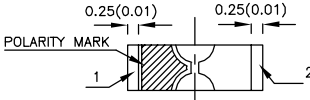

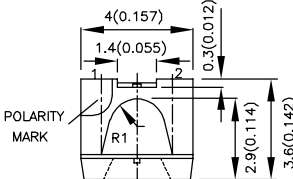
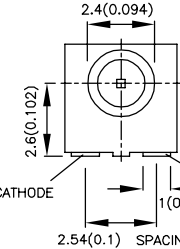
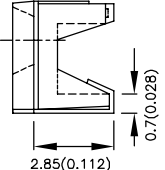
Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle	Dimensions
				Min.	Typ.		
APD3224EC-F01	GaAsP/GaP	617	Water Clear	40	60	20°	<p>3.2mm x 2.4mm x 2.4mm (Dome Lens)</p> <p>APD3224</p>
APD3224SURCK-F01	AlGaInP	630	Water Clear	700	1500	20°	
APD3224SECK-F01	AlGaInP	601	Water Clear	1000	1600	20°	
APD3224YC-F01	GaAsP/GaP	588	Water Clear	20	50	20°	
APD3224SYCK-F01	AlGaInP	590	Water Clear	1000	1300	20°	
APD3224SGC-F01	GaP	568	Water Clear	55	100	20°	
APD3224CGCK-F01	AlGaInP	570	Water Clear	400	600	20°	
APD3224ZGC-F01	InGaN	525	Water Clear	1900	3000	20°	
APD3224QBC/D-F01	InGaN	465	Water Clear	400	800	20°	
APED3528SURCK-F01	AlGaInP	630	Water Clear	120	250	40°	
APED3528SEC/J3	AlGaInP	625	Water Clear	1000	2000	40°	
APED3528SEC/J4	AlGaInP	605	Water Clear	1300	1800	40°	
APED3528SYCK-F01	AlGaInP	590	Water Clear	300	500	40°	
APED3528SYC/J3	AlGaInP	590	Water Clear	700	1500	40°	
APED3528CGCK-F01	AlGaInP	570	Water Clear	80	200	40°	
APED3528ZGC-F01	InGaN	525	Water Clear	1000	1600	40°	
APED3528QBC/D-F01	InGaN	465	Water Clear	300	400	40°	
APED3528VBC/D	InGaN	470	Water Clear	500	750	40°	

RIGHT ANGLE SMD LED

Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle	Dimensions
				Min.	Typ.		
APA1606SURCK	AlGaInP	630	Water Clear	40	80	110°	<p>1.6mm x 0.6mm x 1.2mm (0602 Right Angle)</p> <p>APA1606</p>
APA1606SECK	AlGaInP	601	Water Clear	80	180	110°	
APA1606SYCK	AlGaInP	590	Water Clear	80	150	110°	
APA1606SGC	GaP	568	Water Clear	5	12	110°	
APA1606CGCK	AlGaInP	570	Water Clear	20	50	110°	
APA1606ZGC	InGaN	525	Water Clear	200	400	110°	
APA1606QBC/D	InGaN	465	Water Clear	40	80	110°	
APA2106SRCPRV	GaAlAs	640	Water Clear	12	30	120°	<p>2.1mm x 0.6mm x 1.0mm (0802 Right Angle)</p> <p>APA2106</p>
APA2106SURCK	AlGaInP	630	Water Clear	40	80	120°	
APA2106SECK	AlGaInP	601	Water Clear	80	180	120°	
APA2106SYCK	AlGaInP	590	Water Clear	80	150	120°	
APA2106CGCK	AlGaInP	570	Water Clear	20	50	120°	
APA2106ZGC	InGaN	525	Water Clear	200	400	120°	
APA2106QBC/D	InGaN	465	Water Clear	40	80	120°	

NOTE: AP series custom-made is available upon request.

RIGHT ANGLE SMD LED

Part Number	Material	λD (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 2θ1/2	Dimensions
				Min.	Typ.		
AA2810ASURSK	AlGaInP	630	Water Clear	40	100	110°	<p>2.8mm x 0.8mm x 1.2mm (Right Angle)</p>  <p>AA2810A</p>     <p>Units : mm(inch) Tolerance : ±0.1(0.004)</p>
AA2810ASES/J3	AlGaInP	625	Water Clear	400	550	110°	
AA2810ASESK	AlGaInP	601	Water Clear	120	250	110°	
AA2810ASYS/J3	AlGaInP	590	Water Clear	400	600	110°	
AA2810ACGSK	AlGaInP	570	Water Clear	20	60	110°	
AA2810AZGSK	InGaN	525	Water Clear	400	600	110°	
AA2810AQBS/D	InGaN	465	Water Clear	80	150	110°	
APA3010SRCPRV-GX	GaAlAs	640	Water Clear	12	30	120°	<p>3.0mm x 1.0mm x 2.0mm (1104 Right Angle)</p>  <p>APA3010</p>    <p>Units : mm(inch) Tolerance : ±0.15(0.006)</p>
APA3010SURCK-GX	AlGaInP	630	Water Clear	40	80	120°	
APA3010SECK-GX	AlGaInP	601	Water Clear	80	180	120°	
APA3010SYCK-GX	AlGaInP	590	Water Clear	80	150	120°	
APA3010CGCK-GX	AlGaInP	570	Water Clear	20	50	120°	
APA3010ZGC-GX	InGaN	525	Water Clear	200	400	120°	
APA3010QBC/D-GX	InGaN	465	Water Clear	40	80	120°	
AA4040SRS	GaAlAs	640	Water Clear	20	60	120°	<p>4.0mm x 4.0mm x 3.6mm (Right Angle)</p>  <p>AA4040</p>    <p>Units : mm(inch) Tolerance : ±0.25(0.01)</p>
AA4040SURSK	AlGaInP	630	Water Clear	80	150	120°	
AA4040SESK	AlGaInP	601	Water Clear	80	220	120°	
AA4040YS	GaAsP/GaP	588	Water Clear	8	12	120°	
AA4040SYSK	AlGaInP	590	Water Clear	120	250	120°	
AA4040SGS	GaP	568	Water Clear	12	30	120°	
AA4040CGSK	AlGaInP	570	Water Clear	40	90	120°	
AA4040ZGS	InGaN	525	Water Clear	400	800	120°	
AA4040QBS/D	InGaN	465	Water Clear	80	220	120°	

MULTI-COLOR SMD LED

Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle	Dimensions	
				Min.	Typ.			
APHB1608SYKSURKC	AlGaInP	590	Water Clear	80	150	130°	<p>1.6mm x 0.8mm x 0.5mm (0603 Bi-Color)</p> <p>Units: mm(inch) Tolerance: ±0.15(0.006)</p>	
	AlGaInP	630		40	90			
APHB1608CGKSURKC	AlGaInP	570	Water Clear	20	50	130°		
	AlGaInP	630		40	90			
APHB1608CGKSYKC	AlGaInP	570	Water Clear	20	50	130°		
	AlGaInP	590		80	150			
APHB1608ZGSURKC	InGaN	525	Water Clear	200	350	130°		
	AlGaInP	630		40	90			
APHB1608ZGSYKC	InGaN	525	Water Clear	200	350	130°		
	AlGaInP	590		80	150			
APHB1608QBDSURKC	InGaN	465	Water Clear	40	70	130°		
	AlGaInP	630		40	90			
APHB1608QBDSYKC	InGaN	465	Water Clear	40	70	130°		
	AlGaInP	590		80	150			
APHB1608QBDCGKC	InGaN	465	Water Clear	40	70	130°		
	AlGaInP	570		20	50			
APTB1612ESGC-F01	GaAsP/GaP	617	Water Clear	3	7	120°	<p>1.6mm x 1.25mm x 0.65mm (0605 Bi-Color)</p> <p>Units: mm(inch) Tolerance: ±0.2(0.008)</p>	
	GaP	568		5	12			
APTB1612SURKCGKC-F01	AlGaInP	630	Water Clear	40	80	120°		
	AlGaInP	570		20	50			
APTB1612SURKQBDC-F01	AlGaInP	630	Water Clear	40	80	120°		
	InGaN	465		40	80			
APTB1612YSGC-F01	GaAsP/GaP	588	Water Clear	3	8	120°		
	GaP	568		5	12			
APTB1612SYKCGKC-F01	AlGaInP	590	Water Clear	80	120	120°		
	AlGaInP	570		20	50			
APTB1615ESGC-F01	GaAsP/GaP	617	Water Clear	3	7	120°	<p>1.6mm x 1.5mm x 0.7mm (0606 Bi-Color)</p> <p>Units: mm(inch) Tolerance: ±0.2(0.008)</p>	
	GaP	568		5	12			
APTB1615SURKCGKC-F01	AlGaInP	630	Water Clear	40	80	120°		
	AlGaInP	570		20	50			
APTB1615YSGC-F01	GaAsP/GaP	588	Water Clear	3	8	120°		
	GaP	568		5	12			
APTB1615SYKCGKC-F01	AlGaInP	590	Water Clear	80	120	120°		
	AlGaInP	570		20	50			
APTF1616SEEZQBDC	AlGaInP	621	Water Clear	55	110	120°		<p>1.6mm x 1.6mm x 0.7mm (Full Color)</p> <p>Units: mm(inch) Tolerance: ±0.2(0.008)</p>
	InGaN	525		120	280			
	InGaN	465		40	70			
APTF1616SEJ3ZGGVBDC	AlGaInP	625	Water Clear	200	360	120°		
	InGaN	525		500	750			
	InGaN	470		80	140			

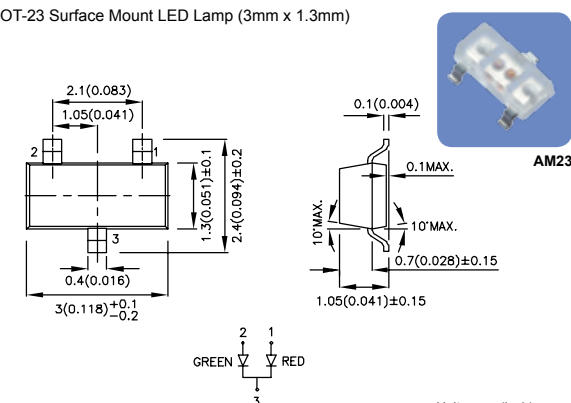
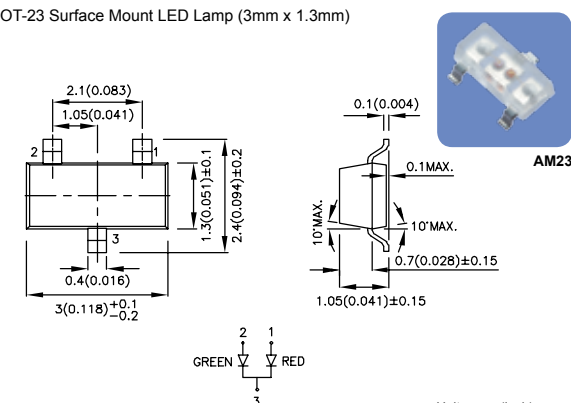
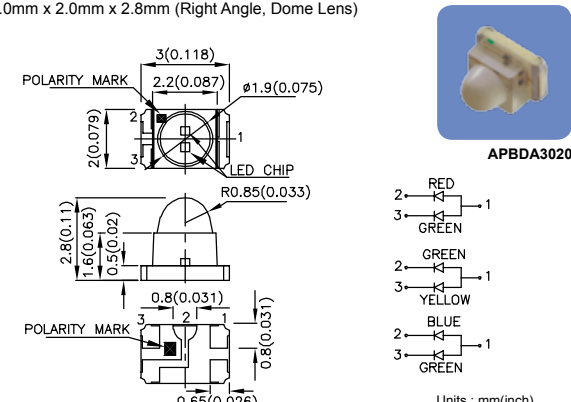
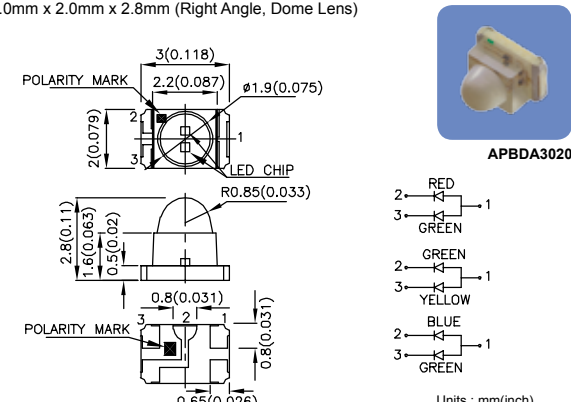
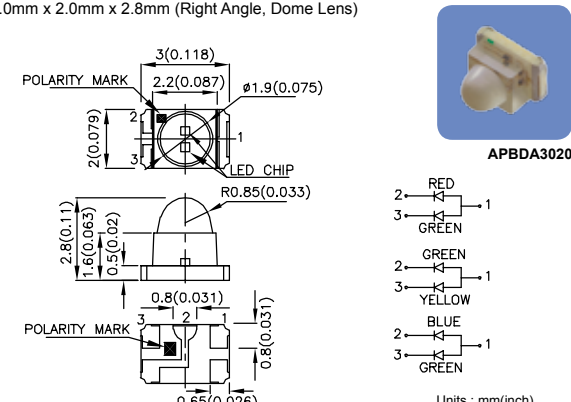
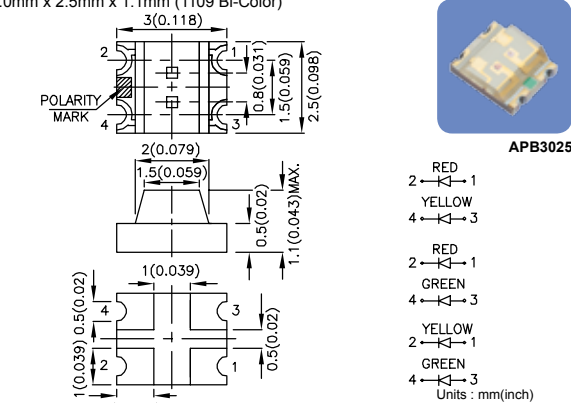
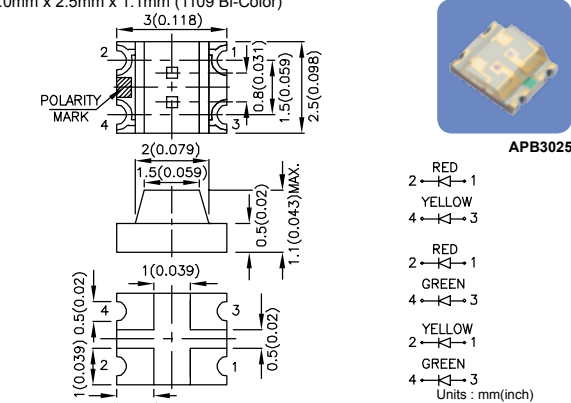
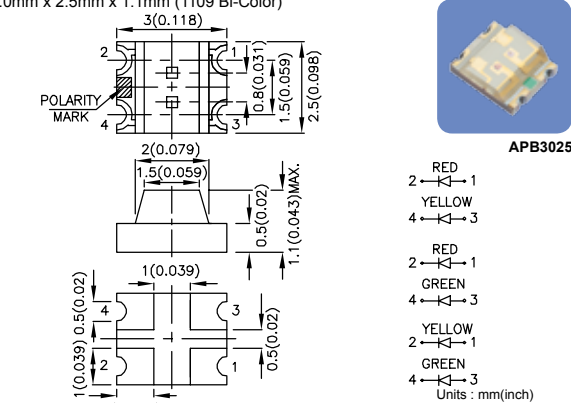
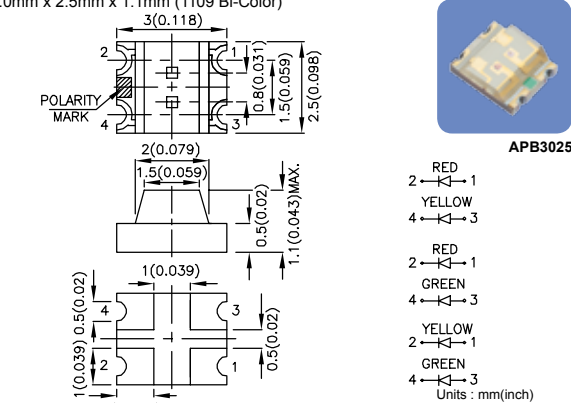
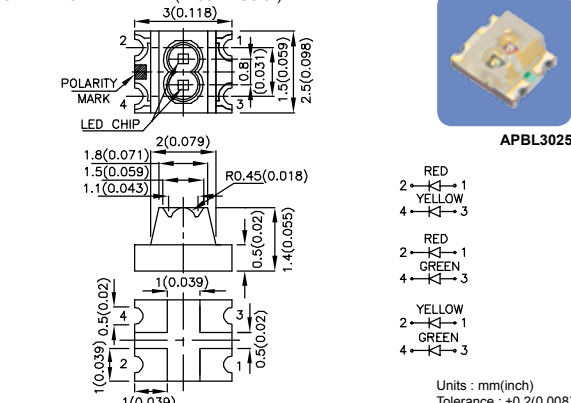
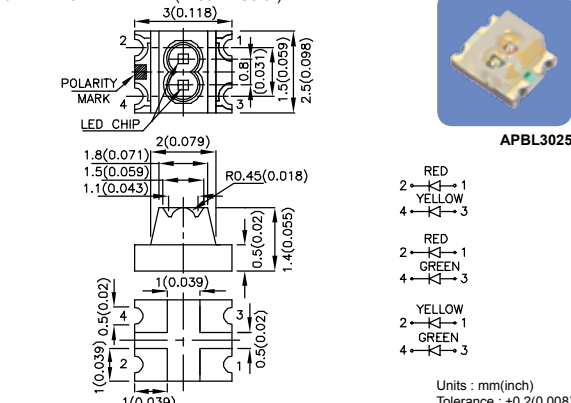
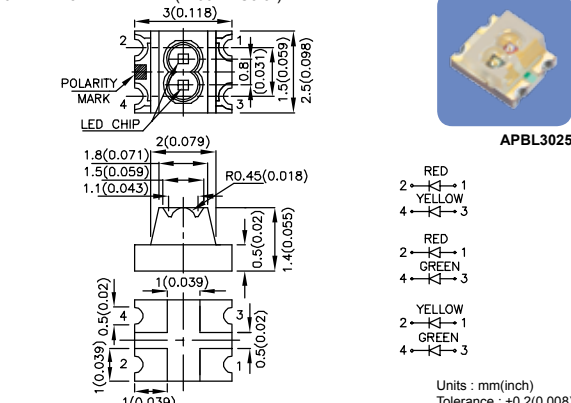
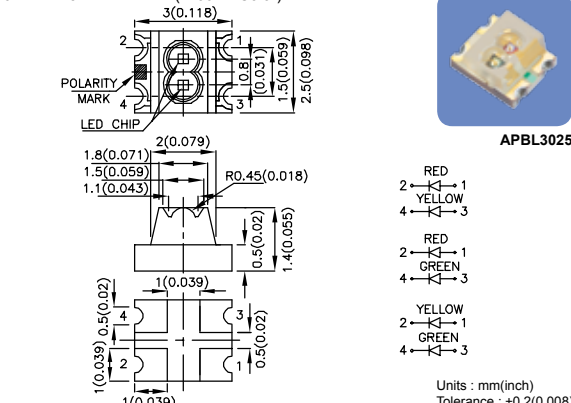
NOTE: AP series custom-made is available upon request.

MULTI-COLOR SMD LED

SMD LED ■ MULTI-COLOR SMD LED

Part Number	Material	λD (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle	Dimensions
				Min.	Typ.		
APHBM2012SURKCGKC	AlGaInP	630	Water Clear	40	80	120°	<p>2.0mm x 1.25mm x 0.45mm (0805 Super Thin, Bi-Color)</p> <p>Units: mm(inch) Tolerance: ±0.1(0.004)</p>
	AlGaInP	570		20	50		
APHBM2012CGKSEKC	AlGaInP	570	Water Clear	20	50	120°	
	AlGaInP	601		80	180		
APHBM2012CGKSYKC	AlGaInP	570	Water Clear	20	50	120°	
	AlGaInP	590		80	120		
APHBM2012QBDSURKC	InGaIn	465	Water Clear	40	80	120°	
	AlGaInP	630		40	80		
APHBM2012QBDCGKC	InGaIn	465	Water Clear	40	80	120°	
	AlGaInP	570		20	50		
APB2012SURKCGKC	AlGaInP	630	Water Clear	40	80	150°	<p>2.0mm x 1.25mm x 1.1mm (Bi-Color)</p> <p>Units: mm(inch) Tolerance: ±0.15(0.006)</p>
	AlGaInP	570		20	50		
APB2012SURKSYKC	AlGaInP	630	Water Clear	40	80	150°	
	AlGaInP	590		80	120		
APB2012SYKCGKC	AlGaInP	590	Water Clear	80	120	150°	
	AlGaInP	570		20	50		
APB2012CGKSEKC	AlGaInP	570	Water Clear	20	50	150°	
	AlGaInP	601		80	180		
APB2012QBDCGKC	InGaIn	465	Water Clear	40	80	150°	
	AlGaInP	570		20	50		
APB2012QBDZGC	InGaIn	465	Water Clear	40	80	150°	
	InGaIn	525		200	300		
APBA3010EYC-GX	GaAsP/GaP	617	Water Clear	3	8	140°	<p>3.0mm x 1.0mm x 2.0mm (1104 Right Angle, Bi-Color)</p> <p>Units: mm(inch) Tolerance: ±0.15(0.006)</p>
	GaAsP/GaP	588		5	8		
APBA3010ESGC-GX	GaAsP/GaP	617	Water Clear	3	8	140°	
	GaP	568		5	15		
APBA3010YSGC-GX	GaAsP/GaP	588	Water Clear	5	8	140°	
	GaP	568		5	15		
APBA3010SURKCGKC-GX	AlGaInP	630	Water Clear	40	80	140°	
	AlGaInP	570		40	70		
APBA3010SYKCGKC-GX	AlGaInP	590	Water Clear	80	120	140°	
	AlGaInP	570		40	70		
APFA3010SEEZQBDK	AlGaInP	621	Water Clear	80	140	120°	<p>3.0mm x 1.0mm x 1.5mm (1104 Right Angle, Full Color)</p> <p>Units: mm(inch) Tolerance: ±0.2(0.008)</p>
	InGaIn	525		200	300		
	InGaIn	465		40	70		

MULTI-COLOR SMD LED

Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle	Dimensions
				Min.	Typ.		
AM23ESGC	GaAsP/GaP	617	Water Clear	3	5	140°	SOT-23 Surface Mount LED Lamp (3mm x 1.3mm) 
	GaP	568		5	10		
AM23ESGW	GaAsP/GaP	617	White Diffused	3	5	140°	
	GaP	568		5	9		
APBDA3020SURKCGKC-GX	AlGaInP	630	Water Clear	120	300	15°	3.0mm x 2.0mm x 2.8mm (Right Angle, Dome Lens) 
	AlGaInP	570		120	300		
APBDA3020CGKSYKC-GX	AlGaInP	570	Water Clear	120	280	15°	
	AlGaInP	590		400	700		
APBDA3020QBDCGKC-GX	InGaIn	465	Water Clear	120	300	15°	
	AlGaInP	570		120	300		
APB3025EYC-F01	GaAsP/GaP	617	Water Clear	3	8	120°	3.0mm x 2.5mm x 1.1mm (1109 Bi-Color) 
	GaAsP/GaP	588		5	10		
APB3025ESGC-F01	GaAsP/GaP	617	Water Clear	3	8	120°	
	GaP	568		8	15		
APB3025SURKCGKC-F01	AlGaInP	630	Water Clear	40	70	120°	
	AlGaInP	570		20	60		
APB3025YSGC-F01	GaAsP/GaP	588	Water Clear	5	10	120°	
	GaP	568		8	15		
APBL3025EYC-F01	GaAsP/GaP	617	Water Clear	8	15	100°	3.0mm x 2.5mm x 1.4mm (1109 Bi-Color) 
	GaAsP/GaP	588		5	15		
APBL3025ESGC-F01	GaAsP/GaP	617	Water Clear	8	15	100°	
	GaP	568		12	20		
APBL3025SURKCGK-F01	AlGaInP	630	Water Clear	80	200	100°	
	AlGaInP	570		55	120		
APBL3025YSGC-F01	GaAsP/GaP	588	Water Clear	5	15	100°	
	GaP	568		12	20		

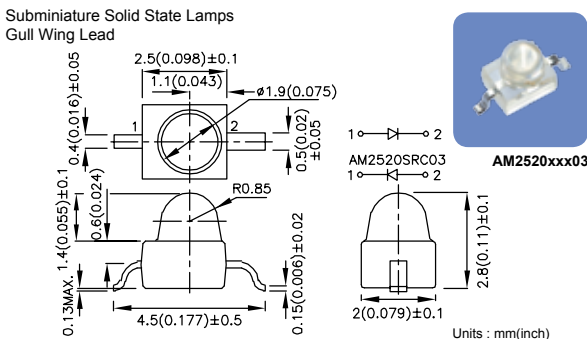
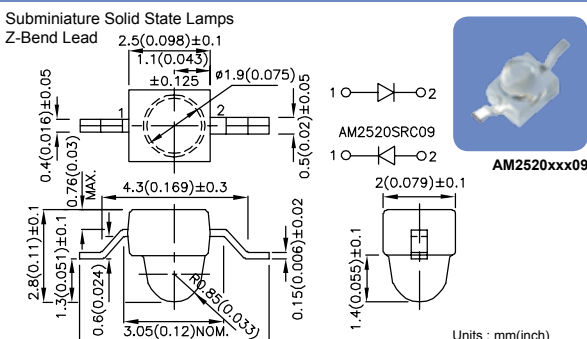
NOTE: AP series custom-made is available upon request.

MULTI-COLOR SMD LED

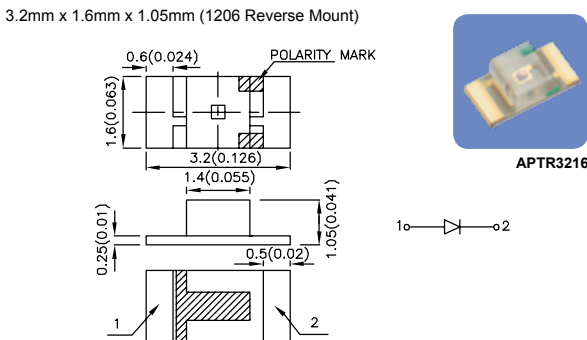
SMD LED ■ MULTI-COLOR SMD LED

Part Number	Material	λD (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle	Dimensions
				Min.	Typ.		
APBD3224ESGC-F01	GaAsP/GaP	617	Water Clear	12	40	20°	3.2mm x 2.4mm x 2.4mm (Dome Lens)
	GaP	568		20	55		
APBD3224SURKCGKC-F01	AlGaInP	630	Water Clear	120	400	20°	
	AlGaInP	570		80	280		
APBD3224SYKCGKC-F01	AlGaInP	590	Water Clear	400	800	20°	
	AlGaInP	570		80	280		
APB3227SEKCGKC	AlGaInP	601	Water Clear	80	180	100°	3.2mm x 2.7mm x 1.1mm (Bi-Color)
	AlGaInP	570		20	55		
APB3227SURKCGKC	AlGaInP	630	Water Clear	40	80	100°	
	AlGaInP	570		20	55		
APB3227SURKZGC	AlGaInP	630	Water Clear	40	80	100°	
	InGaN	525		200	400		
APB3227SYKCGKC	AlGaInP	590	Water Clear	80	150	100°	
	AlGaInP	570		20	55		
APB3227ZGQBDC	InGaN	525	Water Clear	200	400	100°	
	InGaN	465		55	100		
APF3236SEEZGQBDC	AlGaInP	621	Water Clear	80	140	120°	3.2mm x 3.6mm x 1.1mm (Full Color)
	InGaN	525		200	330		
	InGaN	465		40	70		
AAAF3529SEEZGQBDS	AlGaInP	621	Water Clear	80	180	120°	3.5mm x 2.8mm x 1.8mm (Full Color)
	InGaN	525		400	580		
	InGaN	465		80	130		
AAAF3529VBDSEJ3ZGS	InGaN	470	Water Clear	200	300	120°	
	AlGaInP	625		400	560		
	InGaN	525		400	580		

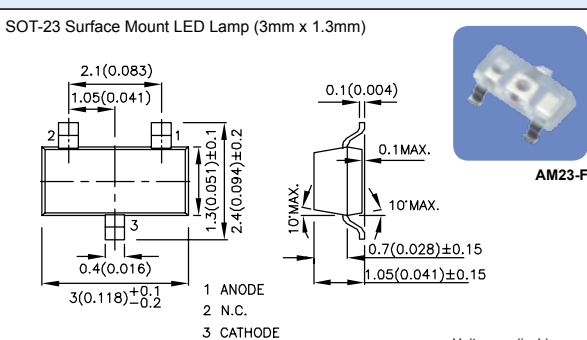
SUBMINIATURE SMD LED

Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle	Dimensions
				Min.	Typ.		
AM2520EC03	GaAsP/GaP	617	Water Clear	20	50	20°	Subminiature Solid State Lamps Gull Wing Lead  AM2520xxx03 Units: mm(inch) Tolerance: ±0.25(0.01)
AM2520SRC03	GaAlAs	640	Water Clear	300	600	20°	
AM2520SURCK03	AlGaInP	630	Water Clear	500	1000	20°	
AM2520SECK03	AlGaInP	601	Water Clear	1000	1800	20°	
AM2520YC03	GaAsP/GaP	588	Water Clear	20	50	20°	
AM2520SYCK03	AlGaInP	590	Water Clear	1300	2300	20°	
AM2520SGC03	GaP	568	Water Clear	40	90	20°	
AM2520CGCK03	AlGaInP	570	Water Clear	400	800	20°	
AM2520ZGC03	InGaN	525	Water Clear	1900	3000	20°	
AM2520QBC/D03	InGaN	465	Water Clear	300	900	20°	Subminiature Solid State Lamps Z-Bend Lead  AM2520xxx09 Units: mm(inch) Tolerance: ±0.25(0.01)
AM2520EC09	GaAsP/GaP	617	Water Clear	20	50	20°	
AM2520SRC09	GaAlAs	640	Water Clear	300	600	20°	
AM2520SURCK09	AlGaInP	630	Water Clear	500	1000	20°	
AM2520SECK09	AlGaInP	601	Water Clear	1000	1800	20°	
AM2520YC09	GaAsP/GaP	588	Water Clear	20	50	20°	
AM2520SYCK09	AlGaInP	590	Water Clear	1300	2300	20°	
AM2520SGC09	GaP	568	Water Clear	40	90	20°	
AM2520CGCK09	AlGaInP	570	Water Clear	400	800	20°	
AM2520ZGC09	InGaN	525	Water Clear	1900	3000	20°	
AM2520QBC/D09	InGaN	465	Water Clear	300	900	20°	

REVERSE MOUNT SMD LED

Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle	Dimensions
				Min.	Typ.		
APTR3216EC	GaAsP/GaP	617	Water Clear	3	8	120°	3.2mm x 1.6mm x 1.05mm (1206 Reverse Mount)  APTR3216 Units: mm(inch) Tolerance: ±0.2(0.008)
APTR3216SRCPRV	GaAlAs	640	Water Clear	12	30	120°	
APTR3216SURCK	AlGaInP	630	Water Clear	40	80	120°	
APTR3216SECK	AlGaInP	601	Water Clear	80	180	120°	
APTR3216YC	GaAsP/GaP	588	Water Clear	3	8	120°	
APTR3216SYCK	AlGaInP	590	Water Clear	80	150	120°	
APTR3216SGC	GaP	568	Water Clear	5	12	120°	
APTR3216CGCK	AlGaInP	570	Water Clear	20	50	120°	
APTR3216ZGC	InGaN	525	Water Clear	200	400	120°	
APTR3216QBC/D	InGaN	465	Water Clear	40	100	120°	

SOT-23 SMD LED

Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle	Dimensions
				Min.	Typ.		
AM23EC-F	GaAsP/GaP	617	Water Clear	3	5	140°	SOT-23 Surface Mount LED Lamp (3mm x 1.3mm)  AM23-F Units: mm(inch) Tolerance: ±0.25(0.01)
AM23ID-F	GaAsP/GaP	617	Red Diffused	3	7	140°	
AM23YC-F	GaAsP/GaP	588	Water Clear	3	8	140°	
AM23YD-F	GaAsP/GaP	588	Yellow Diffused	3	8	140°	
AM23SYC-F	AlGaInP	590	Water Clear	80	130	140°	
AM23SYD-F	AlGaInP	590	Yellow Diffused	80	120	140°	
AM23SGC-F	GaP	568	Water Clear	5	10	140°	
AM23SGD3-F	GaP	568	Green Diffused	3	8	140°	

NOTE: AP series custom-made is available upon request.