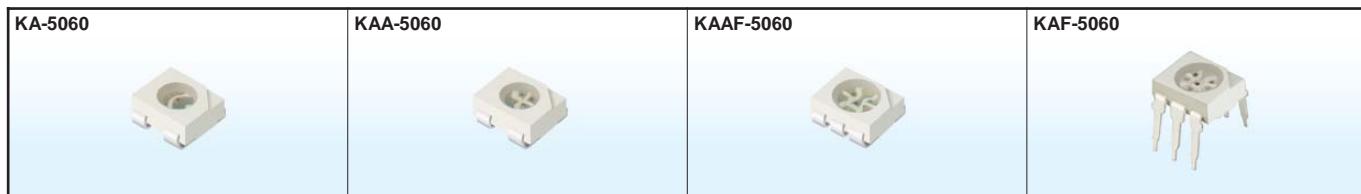


Kingbright Catalog

2005-2006

P 2-3	HIGH CURRENT LED LAMPS
P 3-22	SURFACE MOUNT LED LAMPS
P 23-24	SMD INFRARED EMITTING DIODES
P 25	SMD PHOTOTRANSISTORS

P 26	THROUGH HOLE LED LAMPS
P 27-36	SMD TAPE SPECIFICATIONS
P 37-40	RECOMMENDED SOLDERING PATTERN
P 41	SNAPLED



Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @30mA*50mA		Viewing Angle 201/2	Dimension
				Min.	Typ.		

KA-5060SURC-G	InGaAlP	630	water clear	*480	*750	100°	5.0mm x 6.0mm
KA-5060SEC-H	InGaAlP	630	water clear	*1500	*2300	100°	
KA-5060SYC-H	InGaAlP	589	water clear	*380	*700	100°	
KA-5060PBC-G	InGaN	470	water clear	180	300	100°	
KA-5060VGC-G	InGaN	525	water clear	380	750	100°	
KA-5060ZGC	AllInGaN	525	water clear	180	400	100°	

KAA-5060SUREVGEC	InGaAlP	630	water clear	*380	*700	100°	5.0mm x 6.0mm
	InGaN	525		280	600	100°	
KAA-5060SYEVGEC	InGaAlP	590	water clear	*280	*500	100°	
	InGaN	525		280	600	100°	
KAA-5060SEEVGPEC	InGaAlP	621	water clear	*650	*1000	100°	
	InGaN	525		180	350	100°	
	InGaN	470		110	250	100°	
KAA-5060SURVGPBEC	InGaAlP	628	water clear	*380	*500	100°	
	InGaN	525		180	350	100°	
	InGaN	470		110	250	100°	

KAAF-5060PBESEEVGC	InGaN	470		110	250		5.0mm x 6.0mm
	InGaAlP	621	water clear	*650	*1000	100°	
	InGaN	525		180	350	100°	
KAAF-5060PBESURVGC	InGaN	470		110	250		
	InGaAlP	628	water clear	*380	*500	100°	
	InGaN	525		180	350	100°	

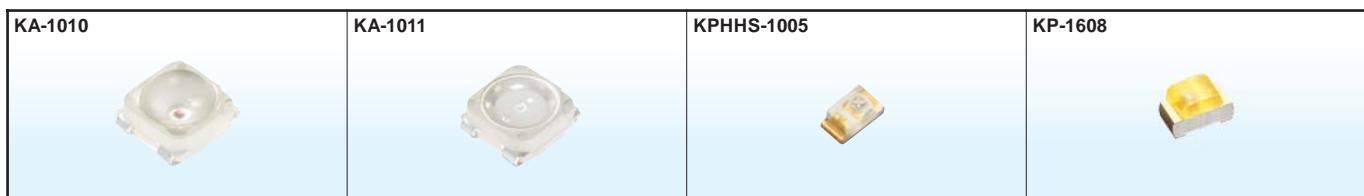
KAF-5060PBESEEVGC	InGaN	470		110	250		5.0mm x 6.0mm
	InGaAlP	621	water clear	*650	*1000	100°	
	InGaN	525		180	350	100°	
KAF-5060PBESURVGC	InGaN	470		110	250		
	InGaAlP	628	water clear	*380	*500	100°	
	InGaN	525		180	350	100°	

NOTES:

- All dimensions are in millimeters(inches).
- Tolerance is ±0.25mm(0.01") unless otherwise noted.

HIGH CURRENT & SURFACE MOUNT LED LAMPS

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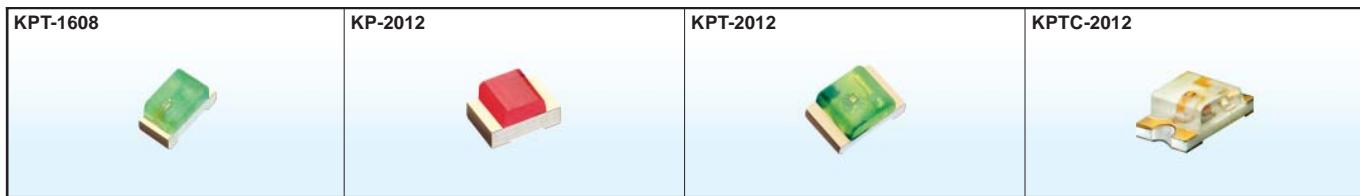


Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA*350mA		Viewing Angle 201/2	Dimension
				Min.	Typ.		
KA-1010SYC28	InGaAlP	588	water clear	*6000	*8500	120°	
				*15000	*20000		
KA-1011SEC28	InGaAlP	625	water clear	*14000	*19000	30°	
				*19000	*25000		
KPHHS-1005SURCK	InGaAlP	635	water clear	50	150	120°	
	InGaAlP	601	water clear	50	160	120°	
	InGaAlP	590	water clear	18	120	120°	
	InGaAlP	570	water clear	10	40	120°	
	InGaN	465	water clear	36	80	120°	
KP-1608EC	GaAsP/GaP	625	water clear	4	12	120°	
	GaAlAs	640	water clear	36	100	120°	
	InGaAlP	628	water clear	70	200	120°	
	InGaAlP	635	water clear	50	150	120°	
	InGaAlP	601	water clear	70	200	120°	
	InGaAlP	601	water clear	50	160	120°	
	GaAsP/GaP	588	water clear	2.6	8	120°	
	InGaAlP	588	water clear	36	150	120°	
	InGaAlP	590	water clear	18	120	120°	
	GaP	568	water clear	4	15	120°	
KP-1608MGC	InGaAlP	568	water clear	18	70	120°	
KP-1608CGCK	InGaAlP	570	water clear	10	40	120°	
KP-1608QBC-C	GaN	470	water clear	36	60	120°	
KP-1608PBC	InGaN	470	water clear	18	60	120°	

1.KA-1010 & KA-1011 series results from mounting on PC board FR4(pad size>=100mm² per pad).

NOTE:

1.KP series custom-made is available upon request.

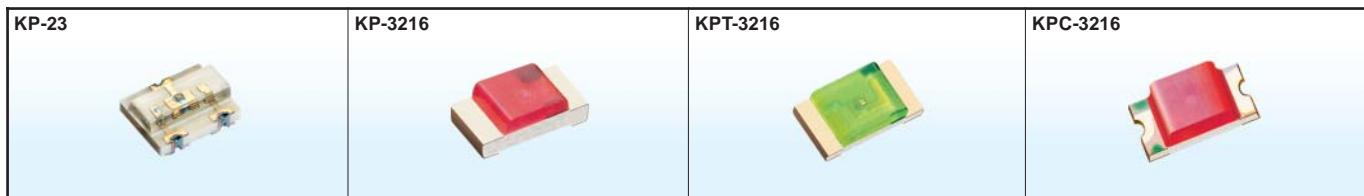


Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA			Viewing Angle 201/2	Dimension
				Min.	Typ.	201/2		
KPT-1608EC	GaAsP/GaP	625	water clear	4	12	120°		
KPT-1608SRC-PRV	GaAlAs	640	water clear	36	100	120°		
KPT-1608SURC	InGaAlP	628	water clear	70	200	120°		
KPT-1608SURCK	InGaAlP	635	water clear	50	150	120°		
KPT-1608SEC	InGaAlP	601	water clear	70	200	120°		
KPT-1608SECK	InGaAlP	601	water clear	50	160	120°		
KPT-1608YC	GaAsP/GaP	588	water clear	2.6	8	120°		
KPT-1608SYC	InGaAlP	588	water clear	36	150	120°		
KPT-1608SYCK	InGaAlP	590	water clear	18	120	120°		
KPT-1608SGC	GaP	568	water clear	4	15	120°		
KPT-1608MGC	InGaAlP	568	water clear	18	70	120°		
KPT-1608CGCK	InGaAlP	570	water clear	10	40	120°		
KPT-1608QBC-C	GaN	470	water clear	36	60	120°		
KPT-1608PBC	InGaN	470	water clear	18	60	120°		
KP-2012EC	GaAsP/GaP	625	water clear	4	12	120°		
KP-2012SRC-PRV	GaAlAs	640	water clear	36	100	120°		
KP-2012SURC	InGaAlP	628	water clear	70	200	120°		
KP-2012SURCK	InGaAlP	635	water clear	50	150	120°		
KP-2012SEC	InGaAlP	601	water clear	70	200	120°		
KP-2012SECK	InGaAlP	601	water clear	50	160	120°		
KP-2012YC	GaAsP/GaP	588	water clear	2.6	8	120°		
KP-2012SYC	InGaAlP	588	water clear	36	150	120°		
KP-2012SYCK	InGaAlP	590	water clear	18	120	120°		
KP-2012SGC	GaP	568	water clear	4	15	120°		
KP-2012MGC	InGaAlP	568	water clear	18	70	120°		
KP-2012CGCK	InGaAlP	570	water clear	10	40	120°		
KP-2012QBC-C	GaN	470	water clear	36	60	120°		
KP-2012PBC	InGaN	470	water clear	18	60	120°		
KPT-2012EC	GaAsP/GaP	625	water clear	4	12	120°		
KPT-2012SRC-PRV	GaAlAs	640	water clear	36	100	120°		
KPT-2012SURC	InGaAlP	628	water clear	70	200	120°		
KPT-2012SURCK	InGaAlP	635	water clear	50	150	120°		
KPT-2012SEC	InGaAlP	601	water clear	70	200	120°		
KPT-2012SECK	InGaAlP	601	water clear	50	160	120°		
KPT-2012YC	GaAsP/GaP	588	water clear	2.6	8	120°		
KPT-2012SYC	InGaAlP	588	water clear	36	150	120°		
KPT-2012SYCK	InGaAlP	590	water clear	18	120	120°		
KPT-2012SGC	GaP	568	water clear	4	15	120°		
KPT-2012MGC	InGaAlP	568	water clear	18	70	120°		
KPT-2012CGCK	InGaAlP	570	water clear	10	40	120°		
KPT-2012QBC-C	GaN	470	water clear	36	60	120°		
KPT-2012PBC	InGaN	470	water clear	18	60	120°		
KPTC-2012EC	GaAsP/GaP	625	water clear	4	12	120°		
KPTC-2012SRC	GaAlAs	640	water clear	36	100	120°		
KPTC-2012SURC	InGaAlP	628	water clear	70	200	120°		
KPTC-2012SURCK	InGaAlP	635	water clear	50	150	120°		
KPTC-2012SEC	InGaAlP	601	water clear	70	200	120°		
KPTC-2012SECK	InGaAlP	601	water clear	50	160	120°		
KPTC-2012YC	GaAsP/GaP	588	water clear	2.6	8	120°		
KPTC-2012SYC	InGaAlP	588	water clear	36	150	120°		
KPTC-2012SYCK	InGaAlP	590	water clear	18	120	120°		
KPTC-2012SGC	GaP	568	water clear	4	15	120°		
KPTC-2012MGC	InGaAlP	568	water clear	18	70	120°		
KPTC-2012CGCK	InGaAlP	570	water clear	10	40	120°		
KPTC-2012QBC-C	GaN	470	water clear	36	60	120°		
KPTC-2012PBC	InGaN	470	water clear	18	60	120°		

NOTE:
1.KP series custom-made is available upon request.

SURFACE MOUNT LED LAMPS

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Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 281/2	Dimension
				Min.	Typ.		

KP-23EC-F	GaAsP/GaP	625	water clear	7	20	120°	<p>KP-23xxx-F (EXCEPT SR TYPE)</p> <p>1. ANODE 1. CATHODE 2. N.C. 2. N.C. 3. CATHODE 3. ANODE</p> <p>KP-23ESGC KP-23YSGC</p> <p>SG V E SG V Y</p> <p>Units : mm(inch) Tolerance : ±0.2(0.008)</p>
KP-23SRC-F	GaAlAs	640	water clear	36	100	120°	
KP-23SURC-F	InGaAlP	628	water clear	110	250	120°	
KP-23SURCK-F	InGaAlP	635	water clear	50	150	120°	
KP-23SEC-F	InGaAlP	601	water clear	70	200	120°	
KP-23SECK-F	InGaAlP	601	water clear	50	160	120°	
KP-23YC-F	GaAsP/GaP	588	water clear	2.6	8	120°	
KP-23SYC-F	InGaAlP	588	water clear	50	100	120°	
KP-23SYCK-F	InGaAlP	590	water clear	18	60	120°	
KP-23SGC-F	GaP	568	water clear	7	20	120°	
KP-23MGC-F	InGaAlP	568	water clear	36	70	120°	
KP-23CGCK-F	InGaAlP	570	water clear	18	60	120°	
KP-23QBC-C-F	GaN	470	water clear	36	60	120°	
KP-23PBC-F	InGaN	470	water clear	18	60	120°	
KP-23ESGC	GaAsP/GaP	625	water clear	7	20	120°	
	GaP	568	water clear	7	20	120°	
KP-23YSGC	GaAsP/GaP	588	water clear	2.6	8	120°	
	GaP	568	water clear	7	20	120°	

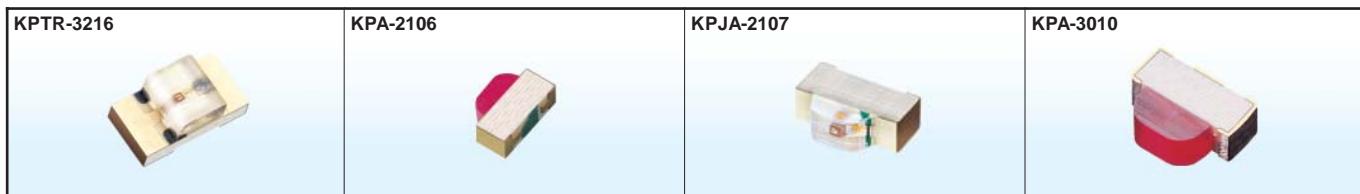
KP-3216EC	GaAsP/GaP	625	water clear	4	12	120°	<p>KP-3216SRC-PRV</p> <p>POLARITY MARK</p> <p>1 → 2</p> <p>Units : mm(inch) Tolerance : ±0.2(0.008)</p>
KP-3216SRC-PRV	GaAlAs	640	water clear	36	80	120°	
KP-3216SURC	InGaAlP	628	water clear	70	200	120°	
KP-3216SURCK	InGaAlP	635	water clear	50	150	120°	
KP-3216SEC	InGaAlP	601	water clear	70	200	120°	
KP-3216SECK	InGaAlP	601	water clear	50	160	120°	
KP-3216YC	GaAsP/GaP	588	water clear	2.6	8	120°	
KP-3216SYC	InGaAlP	588	water clear	36	150	120°	
KP-3216SYCK	InGaAlP	590	water clear	18	120	120°	
KP-3216SGC	GaP	568	water clear	4	15	120°	
KP-3216MGC	InGaAlP	568	water clear	18	70	120°	
KP-3216CGCK	InGaAlP	570	water clear	10	40	120°	
KP-3216QBC-C	GaN	470	water clear	36	60	120°	
KP-3216PBC	InGaN	470	water clear	18	60	120°	

KPT-3216EC	GaAsP/GaP	625	water clear	4	12	120°	<p>KPT-3216SRC-PRV</p> <p>POLARITY MARK</p> <p>1 → 2</p> <p>Units : mm(inch) Tolerance : ±0.2(0.008)</p>
KPT-3216SRC-PRV	GaAlAs	640	water clear	36	80	120°	
KPT-3216SURC	InGaAlP	628	water clear	70	200	120°	
KPT-3216SURCK	InGaAlP	635	water clear	50	150	120°	
KPT-3216SEC	InGaAlP	601	water clear	70	200	120°	
KPT-3216SECK	InGaAlP	601	water clear	50	160	120°	
KPT-3216YC	GaAsP/GaP	588	water clear	2.6	8	120°	
KPT-3216SYC	InGaAlP	588	water clear	36	150	120°	
KPT-3216SYCK	InGaAlP	590	water clear	18	120	120°	
KPT-3216SGC	GaP	568	water clear	4	15	120°	
KPT-3216MGC	InGaAlP	568	water clear	18	70	120°	
KPT-3216CGCK	InGaAlP	570	water clear	10	40	120°	
KPT-3216QBC-C	GaN	470	water clear	36	60	120°	
KPT-3216PBC	InGaN	470	water clear	18	60	120°	

KPC-3216EC	GaAsP/GaP	625	water clear	4	12	120°	<p>KPC-3216SRC-PRV</p> <p>LED CHIP POLARITY MARK</p> <p>1 → 2</p> <p>Units : mm(inch) Tolerance : ±0.2(0.008)</p>
KPC-3216SRC-PRV	GaAlAs	640	water clear	36	80	120°	
KPC-3216SURC	InGaAlP	628	water clear	70	200	120°	
KPC-3216SURCK	InGaAlP	635	water clear	50	150	120°	
KPC-3216SEC	InGaAlP	601	water clear	70	200	120°	
KPC-3216SECK	InGaAlP	601	water clear	50	160	120°	
KPC-3216YC	GaAsP/GaP	588	water clear	2.6	8	120°	
KPC-3216SYC	InGaAlP	588	water clear	36	150	120°	
KPC-3216SYCK	InGaAlP	590	water clear	18	120	120°	
KPC-3216SGC	GaP	568	water clear	4	15	120°	
KPC-3216MGC	InGaAlP	568	water clear	18	70	120°	
KPC-3216CGCK	InGaAlP	570	water clear	10	40	120°	
KPC-3216QBC-C	GaN	470	water clear	36	60	120°	
KPC-3216PBC	InGaN	470	water clear	18	60	120°	

NOTE:

1.KP series custom-made is available upon request.



Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 201/2	Dimension
				Min.	Typ.		

KPTR-3216EC	GaAsP/GaP	625	water clear	4	12	120°	<p>3.2mm x 1.6mm x 1.05mm (1206 Reverse Mount)</p> <p>POLARITY MARK</p> <p>1 → 2</p> <p>Units : mm(inch) Tolerance :±0.2(0.008)</p>
KPTR-3216SRC-PRV	GaAlAs	640	water clear	36	80	120°	
KPTR-3216SURC	InGaAlP	628	water clear	70	200	120°	
KPTR-3216SURCK	InGaAlP	635	water clear	50	150	120°	
KPTR-3216SEC	InGaAlP	601	water clear	70	200	120°	
KPTR-3216SECK	InGaAlP	601	water clear	50	160	120°	
KPTR-3216YC	GaAsP/GaP	588	water clear	2.6	8	120°	
KPTR-3216SYC	InGaAlP	588	water clear	36	150	120°	
KPTR-3216SYCK	InGaAlP	590	water clear	18	120	120°	
KPTR-3216SGC	GaP	568	water clear	4	15	120°	
KPTR-3216MGC	InGaAlP	568	water clear	18	70	120°	
KPTR-3216CGCK	InGaAlP	570	water clear	10	40	120°	
KPTR-3216QBC-C	GaN	470	water clear	36	60	120°	
KPTR-3216PBC	InGaN	470	water clear	18	60	120°	

KPA-2106EC	GaAsP/GaP	625	water clear	4	15	120°	<p>2.1mm x 0.6mm x 1.0mm (0802 Right Angle)</p> <p>CATHODE MARK</p> <p>1 → 2</p> <p>Units : mm(inch) Tolerance :±0.1(0.004)</p>
KPA-2106SRC-PRV	GaAlAs	640	water clear	50	100	120°	
KPA-2106SURC	InGaAlP	628	water clear	70	200	120°	
KPA-2106SURCK	InGaAlP	635	water clear	50	150	120°	
KPA-2106SEC	InGaAlP	601	water clear	70	300	120°	
KPA-2106SECK	InGaAlP	601	water clear	50	250	120°	
KPA-2106YC	GaAsP/GaP	588	water clear	2.6	7	120°	
KPA-2106SYC	InGaAlP	588	water clear	36	120	120°	
KPA-2106SYCK	InGaAlP	590	water clear	18	100	120°	
KPA-2106SGC	GaP	568	water clear	4	15	120°	
KPA-2106MGC	InGaAlP	568	water clear	36	80	120°	
KPA-2106CGCK	InGaAlP	570	water clear	18	60	120°	
KPA-2106QBC-C	GaN	470	water clear	36	60	120°	
KPA-2106PBC	InGaN	470	water clear	18	60	120°	

KPJA-2107EC	GaAsP/GaP	625	water clear	4	15	120°	<p>2.1mm x 0.7mm x 1.3mm (0802 Right Angle)</p> <p>CATHODE MARK</p> <p>1 → 2</p> <p>KPJA-2107SRC-PRV</p> <p>KPJA-2107QBC-C-PRV</p> <p>Units : mm(inch) Tolerance :±0.15(0.006)</p>
KPJA-2107SRC-PRV	GaAlAs	640	water clear	50	100	120°	
KPJA-2107SURC	InGaAlP	628	water clear	70	200	120°	
KPJA-2107SURCK	InGaAlP	635	water clear	50	150	120°	
KPJA-2107SEC	InGaAlP	601	water clear	70	300	120°	
KPJA-2107SECK	InGaAlP	601	water clear	50	250	120°	
KPJA-2107YC	GaAsP/GaP	588	water clear	2.6	7	120°	
KPJA-2107SYC	InGaAlP	588	water clear	36	120	120°	
KPJA-2107SYCK	InGaAlP	590	water clear	18	100	120°	
KPJA-2107SGC	GaP	568	water clear	4	15	120°	
KPJA-2107MGC	InGaAlP	568	water clear	36	80	120°	
KPJA-2107CGCK	InGaAlP	570	water clear	18	60	120°	
KPJA-2107QBC-C-PRV	GaN	470	water clear	36	60	120°	
KPJA-2107PBC	InGaN	470	water clear	18	60	120°	

KPA-3010EC	GaAsP/GaP	625	water clear	4	15	120°	<p>3.0mm x 1.0mm x 2.0mm (1104 Right Angle)</p> <p>POLARITY MARK</p> <p>1 → 2</p> <p>Units : mm(inch) Tolerance :±0.15(0.006)</p>
KPA-3010SRC-PRV	GaAlAs	640	water clear	50	100	120°	
KPA-3010SURC	InGaAlP	628	water clear	70	200	120°	
KPA-3010SURCK	InGaAlP	635	water clear	50	150	120°	
KPA-3010SEC	InGaAlP	601	water clear	70	300	120°	
KPA-3010SECK	InGaAlP	601	water clear	50	250	120°	
KPA-3010YC	GaAsP/GaP	588	water clear	2.6	7	120°	
KPA-3010SYC	InGaAlP	588	water clear	36	120	120°	
KPA-3010SYCK	InGaAlP	590	water clear	18	100	120°	
KPA-3010SGC	GaP	568	water clear	4	15	120°	
KPA-3010MGC	InGaAlP	568	water clear	36	80	120°	
KPA-3010CGCK	InGaAlP	570	water clear	18	60	120°	
KPA-3010QBC-C	GaN	470	water clear	36	60	120°	
KPA-3010PBC	InGaN	470	water clear	18	60	120°	

NOTE:

1.KP series custom-made is available upon request.

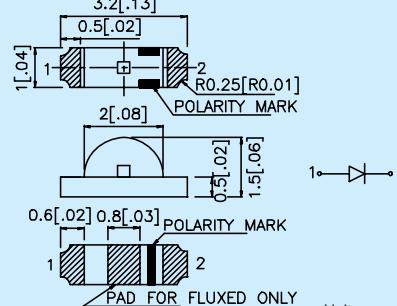
SURFACE MOUNT LED LAMPS

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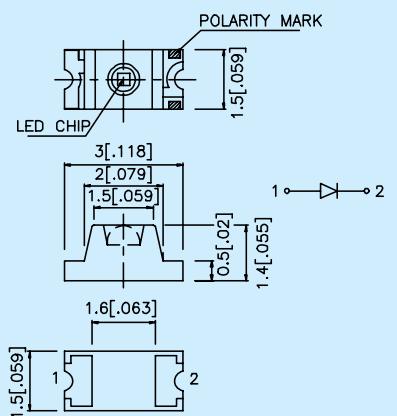


Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 281/2	Dimension
				Min.	Typ.		

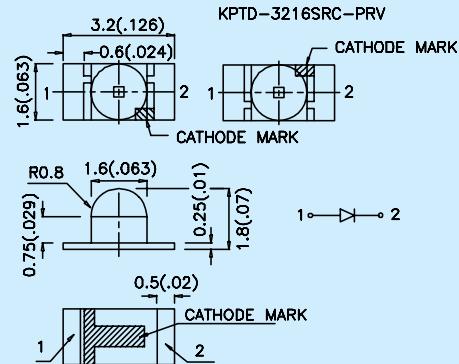
KPA-3210SURC	InGaAIP	628	water clear	110	250	120°	3.2mm x 1.0mm x 1.5mm (1304 Right Angle)
KPA-3210SURCK	InGaAIP	635	water clear	70	150	120°	
KPA-3210SEC	InGaAIP	601	water clear	70	300	120°	
KPA-3210SECK	InGaAIP	601	water clear	70	180	120°	
KPA-3210SYC	InGaAIP	588	water clear	36	100	120°	
KPA-3210SYCK	InGaAIP	590	water clear	18	70	120°	
KPA-3210MGC	InGaAIP	568	water clear	36	90	120°	
KPA-3210CGCK	InGaAIP	570	water clear	18	50	120°	
KPA-3210QBC-C	GaN	470	water clear	36	60	120°	
KPA-3210PBC	InGaN	470	water clear	18	60	120°	
KPA-3210VGC	InGaN	525	water clear	70	180	120°	



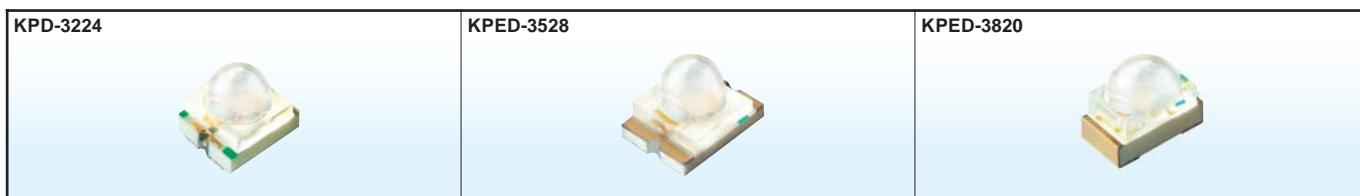
KPL-3015EC	GaAsP/GaP	625	water clear	4	20	70°	3.0mm x 1.5mm x 1.4mm (1106)
KPL-3015SRC-PRV	GaAlAs	640	water clear	36	80	70°	
KPL-3015SURC	InGaAIP	628	water clear	110	280	70°	
KPL-3015SURCK	InGaAIP	635	water clear	70	240	70°	
KPL-3015SEC	InGaAIP	601	water clear	180	500	70°	
KPL-3015SECK	InGaAIP	601	water clear	70	300	70°	
KPL-3015YC	GaAsP/GaP	588	water clear	2.6	10	70°	
KPL-3015SYC	InGaAIP	588	water clear	36	150	70°	
KPL-3015SYCK	InGaAIP	590	water clear	36	100	70°	
KPL-3015SGC	GaP	568	water clear	4	20	70°	
KPL-3015MGC	InGaAIP	568	water clear	70	140	70°	
KPL-3015CGCK	InGaAIP	570	water clear	36	90	70°	
KPL-3015QBC-C	GaN	470	water clear	70	150	70°	
KPL-3015PBC	InGaN	470	water clear	50	120	70°	



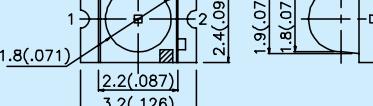
KPTD-3216EC	GaAsP/GaP	625	water clear	10	50	40°	3.2mm x 1.6mm x 1.8mm (1206 Dome Lens)
KPTD-3216SRC-PRV	GaAlAs	640	water clear	110	300	50°	
KPTD-3216SURC	InGaAIP	628	water clear	280	600	50°	
KPTD-3216SURCK	InGaAIP	635	water clear	180	500	50°	
KPTD-3216SEC	InGaAIP	601	water clear	380	1200	50°	
KPTD-3216SECK	InGaAIP	601	water clear	280	700	50°	
KPTD-3216YC	GaAsP/GaP	588	water clear	4	30	40°	
KPTD-3216SYC	InGaAIP	588	water clear	110	300	50°	
KPTD-3216SYCK	InGaAIP	590	water clear	70	250	50°	
KPTD-3216SGC	GaP	568	water clear	10	50	40°	
KPTD-3216MGC	InGaAIP	568	water clear	110	350	50°	
KPTD-3216CGCK	InGaAIP	570	water clear	70	200	50°	
KPTD-3216QBC-C	GaN	470	water clear	180	350	40°	
KPTD-3216PBC	InGaN	470	water clear	70	220	50°	

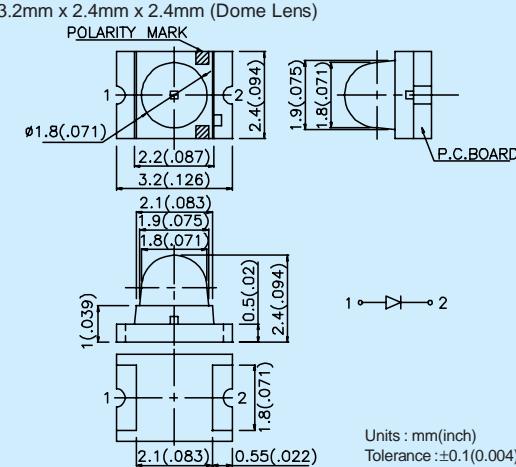


NOTE:
1.KP series custom-made is available upon request.

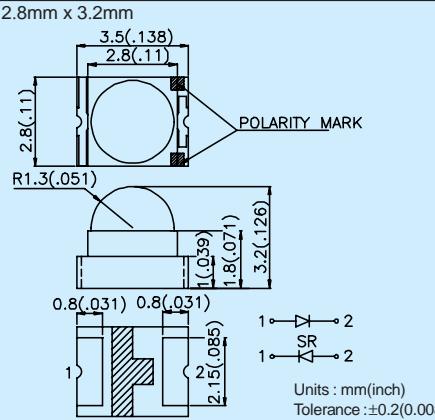


Part No.	Material	λD (nm)	Lens Type	IV (mcd) @20mA		Viewing Angle	Dimension
				Min.	Typ.		

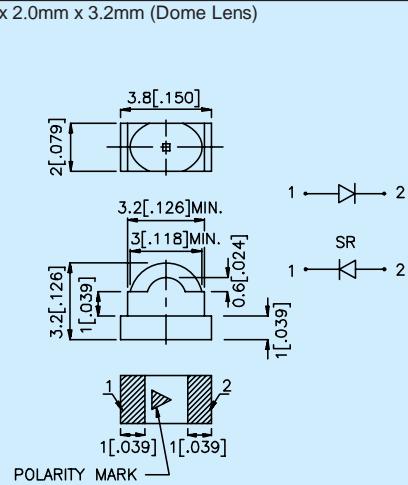
KPD-3224EC	GaAsP/GaP	625	water clear	36	70	20°	3.2mm x 2.4mm x 2.4mm (Dome Lens) POLARITY MARK
KPD-3224SURC	InGaAlP	628	water clear	650	1200	20°	
KPD-3224SURCK	InGaAlP	635	water clear	480	1000	20°	
KPD-3224SEC	InGaAlP	601	water clear	650	2000	20°	
KPD-3224SECK	InGaAlP	601	water clear	650	1300	20°	
KPD-3224YC	GaAsP/GaP	588	water clear	10	40	20°	
KPD-3224SYC	InGaAlP	588	water clear	180	700	20°	
KPD-3224SYCK	InGaAlP	590	water clear	110	600	20°	
KPD-3224SGC	GaP	568	water clear	18	70	20°	
KPD-3224MGC	InGaAlP	568	water clear	280	550	20°	
KPD-3224CGCK	InGaAlP	570	water clear	180	550	20°	
KPD-3224QBC-C	GaN	470	water clear	180	400	20°	
KPD-3224PBC	InGaN	470	water clear	110	380	20°	



KPED-3528EC	GaAsP/GaP	625	water clear	18	50	40°	<p>3.5mm x 2.8mm x 3.2mm</p> <p>3.5(.138) 2.8(.11)</p> <p>POLARITY MARK</p> <p>2.8(.11)</p> <p>R1.3(.051)</p> <p>1.8(.071) 1(.039) 3.2(.126)</p> <p>0.8(.031) 0.8(.031)</p> <p>2.15(.085)</p> <p>1 → 2 SR 1 ← 2</p> <p>Units : mm(inch) Tolerance : ±0.2(0.008)</p>
KPED-3528SRC	GaAlAs	640	water clear	70	200	40°	
KPED-3528SURC	InGaAlP	628	water clear	110	500	40°	
KPED-3528SURCK	InGaAlP	635	water clear	110	450	40°	
KPED-3528SEC	InGaAlP	601	water clear	380	700	40°	
KPED-3528SECK	InGaAlP	601	water clear	280	550	40°	
KPED-3528YC	GaAsP/GaP	588	water clear	7	20	40°	
KPED-3528SYC	InGaAlP	588	water clear	70	250	40°	
KPED-3528SYCK	InGaAlP	590	water clear	70	200	40°	
KPED-3528SGC	GaP	568	water clear	18	50	40°	
KPED-3528SGT	GaP	568	green transparent	10	25	40°	
KPED-3528MGC	InGaAlP	568	water clear	70	250	40°	
KPED-3528VGC	InGaN	525	water clear	110	300	40°	
KPED-3528VGC-E	InGaN	525	water clear	280	400	40°	
KPED-3528PBC	InGaN	470	water clear	50	150	40°	
KPED-3528PBC-E	InGaN	470	water clear	70	200	40°	



KPED-3820EC	GaAsP/GaP	625	water clear	18	40	60°(H) 35°(V)	3.8mm x 2.0mm x 3.2mm (Dome Lens)
KPED-3820SRC	GaAlAs	640	water clear	110	240	60°(H) 35°(V)	
KPED-3820SURC	InGaAlP	628	water clear	180	500	60°(H) 35°(V)	
KPED-3820SURCK	InGaAlP	635	water clear	180	450	60°(H) 35°(V)	
KPED-3820SEC	InGaAlP	601	water clear	480	800	60°(H) 35°(V)	
KPED-3820SECK	InGaAlP	601	water clear	280	600	60°(H) 35°(V)	
KPED-3820YC	GaAsP/GaP	588	water clear	7	20	60°(H) 35°(V)	
KPED-3820SYC	InGaAlP	588	water clear	110	250	60°(H) 35°(V)	
KPED-3820SYCK	InGaAlP	590	water clear	70	200	60°(H) 35°(V)	
KPED-3820SGC	GaP	568	water clear	10	40	60°(H) 35°(V)	
KPED-3820MGC	InGaAlP	568	water clear	70	250	60°(H) 35°(V)	
KPED-3820CGCK	InGaAlP	570	water clear	70	170	60°(H) 35°(V)	
KPED-3820QBC-C	GaN	470	water clear	70	250	60°(H) 35°(V)	
KPED-3820PBC	InGaN	470	water clear	50	150	60°(H) 35°(V)	



NOTE:

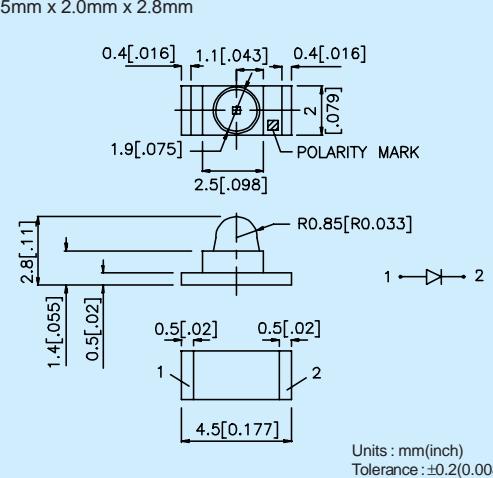
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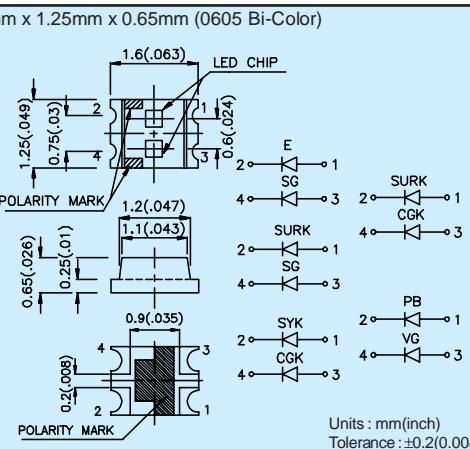
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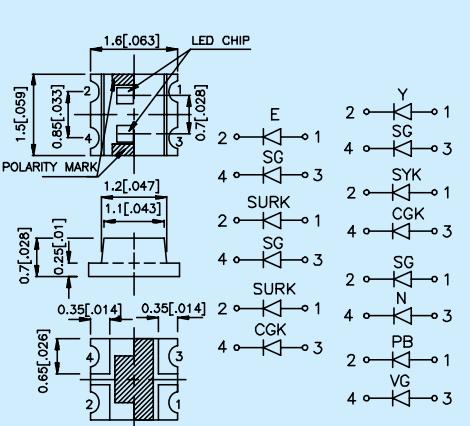
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				Min.	Typ.		
KPD-2520EC-03	GaAsP/GaP	625	water clear	10	60	20°	4.5mm x 2.0mm x 2.8mm
KPD-2520SURC-03	InGaAlP	628	water clear	280	700	20°	
KPD-2520SURCK-03	InGaAlP	635	water clear	180	650	20°	
KPD-2520SEC-03	InGaAlP	601	water clear	380	1300	20°	
KPD-2520SECK-03	InGaAlP	601	water clear	380	1200	20°	
KPD-2520YC-03	GaAsP/GaP	588	water clear	10	25	20°	
KPD-2520SYC-03	InGaAlP	588	water clear	110	450	20°	
KPD-2520SYCK-03	InGaAlP	590	water clear	70	250	20°	
KPD-2520SGC-03	GaP	568	water clear	36	90	20°	
KPD-2520MGC-03	InGaAlP	568	water clear	110	400	20°	
KPD-2520CGCK-03	InGaAlP	570	water clear	70	300	20°	
KPD-2520QBC-C-03	GaN	470	water clear	70	250	20°	
KPD-2520PBC-03	InGaN	470	water clear	70	200	20°	



KPTB-1612ESGC	GaAsP/GaP	625	water clear	4	12	120°	1.6mm x 1.25mm x 0.65mm (0605 Bi-Color)	
	GaP	568		4	12			
KPTB-1612SURKSGC	InGaAlP	635	water clear	70	150	120°		
	GaP	568		4	12			
KPTB-1612SYKCGKC	InGaAlP	590	water clear	18	50	120°		
	InGaAlP	570		18	50			
KPTB-1612SURKCGKC	InGaAlP	635	water clear	70	150	120°		
	InGaAlP	570		18	50			
KPTB-1612PBVGC	InGaN	470	water clear	18	60	120°		
	InGaN	525		70	180			



KPTB-1615ESGC	GaAsP/GaP	625	water clear	4	12	120°	1.6mm x 1.5mm x 0.7mm (0606 Bi-Color)	
	GaP	568		4	12			
KPTB-1615SURKSGC	InGaAlP	635	water clear	70	150	120°		
	GaP	568		4	12			
KPTB-1615SURKCGKC	InGaAlP	635	water clear	70	150	120°		
	InGaAlP	570		18	50			
KPTB-1615YSGC	GaAsP/GaP	588	water clear	2.6	8	120°		
	GaP	568		4	12			
KPTB-1615SYKCGKC	InGaAlP	590	water clear	18	50	120°		
	InGaAlP	570		18	50			
KPTB-1615SGNC	GaP	568	water clear	4	12	120°		
	GaAsP/GaP	610		4	12			
KPTB-1615PBVGC	InGaN	470	water clear	18	60	120°		
	InGaN	525		70	180			



NOTE:

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Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 201/2	Dimension
				Min.	Typ.		

KPBA-3010ESGC	GaAsP/GaP	625	water clear	4	12	140°	<p>3.0mm x 1.0mm x 2mm (1104 Right Angle, Bi-Color)</p> <p>Units : mm(inch) Tolerance : ±0.15(0.006)</p>	
	GaP	568		4	12			
KPBA-3010SURKSGC	InGaAlP	635	water clear	110	200	140°		
	GaP	568		4	12			
KPBA-3010EYC	GaAsP/GaP	625	water clear	4	12	140°		
	GaAsP/GaP	588		2.6	6			
KPBA-3010SURKCGKC	InGaAlP	635	water clear	110	200	140°		
	InGaAlP	570		18	50			
KPBA-3010SYKCGKC	InGaAlP	590	water clear	36	120	140°		
	InGaAlP	570		18	50			
KPBA-3010SGNC	GaP	568	water clear	4	12	140°		
	GaAsP/GaP	610		4	12			
KPBA-3010PBVGC	InGaN	470	water clear	18	60	140°		
	InGaN	525		50	120			

KPBA-3210SURKMGKC	InGaAlP	635	water clear	110	200	120°	<p>3.2mm x 1.0mm x 1.5mm (1304 Right Angle,Bi-Color)</p> <p>Units : mm(inch) Tolerance : ±0.1(0.004)</p>
	InGaAlP	570		36	80		

KPB-3025ESGC	GaAsP/GaP	625	water clear	4	12	120°	<p>3.0mm x 2.5mm x 1.1mm (1109 Bi-Color)</p> <p>Units : mm(inch) Tolerance : ±0.2(0.008)</p>	
	GaP	568		4	12			
KPB-3025EYC	GaAsP/GaP	625	water clear	4	12	120°		
	GaAsP/GaP	588		2.6	8			
KPB-3025NSGC	GaAsP/GaP	610	water clear	4	12	120°		
	GaP	568		4	12			
KPB-3025SRSGC-PRV	GaAlAs	640	water clear	36	100	120°		
	GaP	568		4	12			
KPB-3025SRQGC-PRV	GaAlAs	640	water clear	36	100	120°		
	GaP	565		4	12			
KPB-3025SRPGC-PRV	GaAlAs	640	water clear	36	100	120°		
	GaP	555		1.6	5			
KPB-3025SURKCGKC	InGaAlP	635	water clear	50	160	120°		
	InGaAlP	570		10	40			
KPB-3025YSGC	GaAsP/GaP	588	water clear	2.6	8	120°		
	GaP	568		4	12			

NOTE:

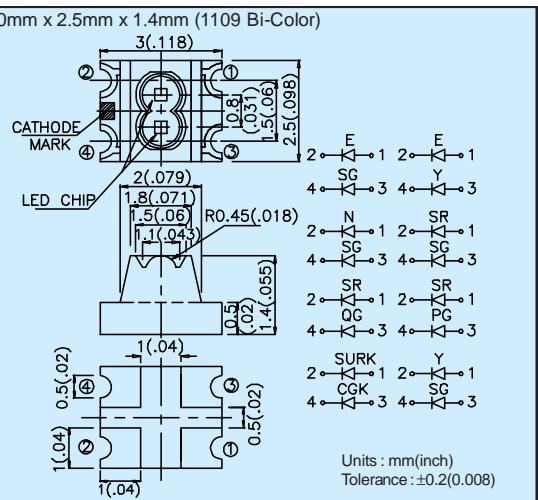
1.KP series custom-made is available upon request.

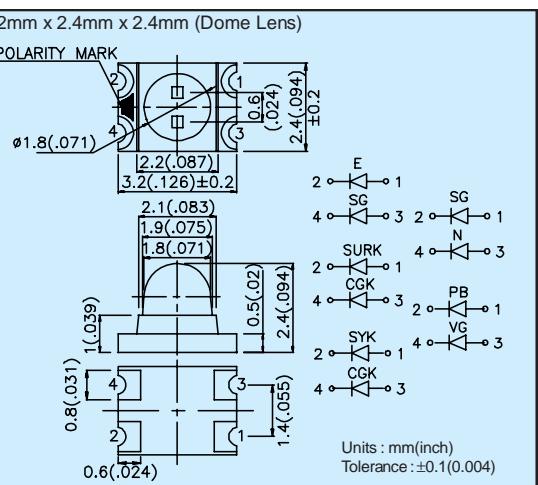
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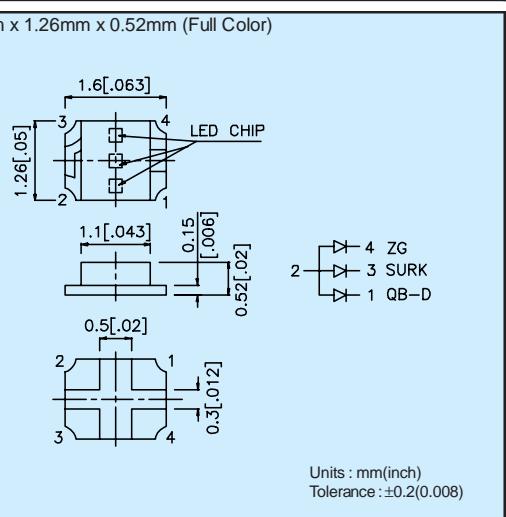
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Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 281/2	Dimension
				Min.	Typ.		

KPBL-3025ESGC	GaAsP/GaP	625	water clear	7	20	100°	 <p>3.0mm x 2.5mm x 1.4mm (1109 Bi-Color)</p> <p>CATHODE MARK</p> <p>LED CHIP</p> <p>Units : mm(inch) Tolerance : ±0.2(0.008)</p>	
	GaP	568		7	20			
KPBL-3025EYC	GaAsP/GaP	625	water clear	7	20	100°		
	GaAsP/GaP	588		4	15			
KPBL-3025NSGC	GaAsP/GaP	610	water clear	7	20	100°		
	GaP	568		7	20			
KPBL-3025SRSGC-PRV	GaAlAs	640	water clear	36	100	100°		
	GaP	568		7	20			
KPBL-3025SRQGC-PRV	GaAlAs	640	water clear	36	100	100°		
	GaP	565		7	20			
KPBL-3025SRPGC-PRV	GaAlAs	640	water clear	36	100	100°		
	GaP	555		2.6	8			
KPBL-3025SURKCGKC	InGaAlP	635	water clear	110	300	100°		
	InGaAlP	570		18	80			
KPBL-3025YSGC	GaAsP/GaP	588	water clear	4	15	100°		
	GaP	568		7	20			

KPBD-3224ESGC	GaAsP/GaP	625	water clear	18	60	20°	 <p>3.2mm x 2.4mm x 2.4mm (Dome Lens)</p> <p>POLARITY MARK</p> <p>Ø1.8(.071)</p> <p>Units : mm(inch) Tolerance : ±0.1(0.004)</p>	
	GaP	568		10	40			
KPBD-3224SURKCGKC	InGaAlP	635	water clear	70	350	20°		
	InGaAlP	570		18	120			
KPBD-3224SYKCGKC	InGaAlP	590	water clear	36	150	20°		
	InGaAlP	570		18	120			
KPBD-3224SGNC	GaP	568	water clear	10	40	20°		
	GaAsP/GaP	610		10	30			
KPBD-3224PBVGC	InGaN	470	water clear	36	100	20°		
	InGaN	525		280	600			

KPHF-1612QBDSURKZGC	GaN	470	water clear	50	90	120°	 <p>1.6mm x 1.26mm x 0.52mm (Full Color)</p> <p>LED CHIP</p> <p>ZG</p> <p>SURK</p> <p>QB-D</p> <p>Units : mm(inch) Tolerance : ±0.2(0.008)</p>
	InGaAlP	635		70	150		
	AllnGaN	525		70	180		

NOTE:

1.KP series custom-made is available upon request.



Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 201/2	Dimension
				Min.	Typ.		
KPEFA-3010QBDVGSEEC	GaN	470	water clear	50	100	120°	<p>3.0mm x 1.0mm x 2.0mm (1104 Right Angle,Full Color)</p> <p>Units : mm(inch) Tolerance : ±0.1(0.004)</p>
	InGaN	525		70	250		
	InGaAlP	621		110	300		

KPFA-3210QBCVGSEKC	GaN	470	water clear	36	70	130°	<p>3.2mm x 1.0mm x 1.5mm (1304 Right Angle,Full Color)</p> <p>Units : mm(inch) Tolerance : ±0.1(0.004)</p>
	InGaN	525		50	200		
	InGaAlP	601		70	200		

KPTF-3216PBVGSKRC	InGaN	470	water clear	50	100	120°	<p>3.2mm x 1.6mm x 0.75mm (1206 Full Color)</p> <p>Units : mm(inch) Tolerance : ±0.2(0.008)</p>
	InGaN	525		70	150		
	InGaAlP	635		70	150		

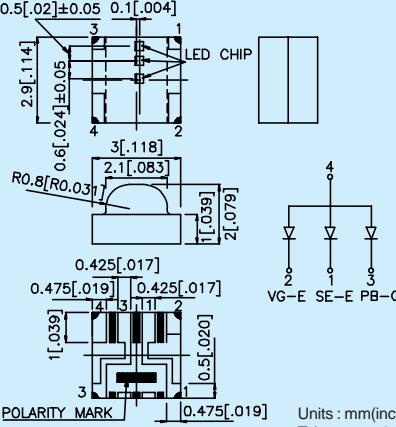
NOTE:

1.KP series custom-made is available upon request.

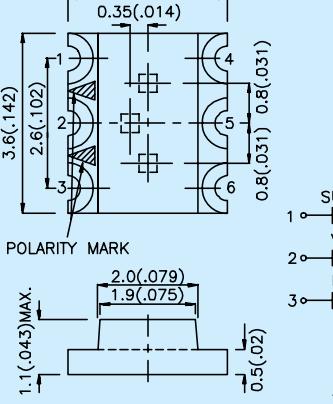
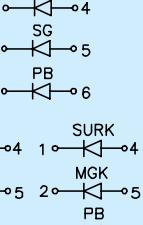
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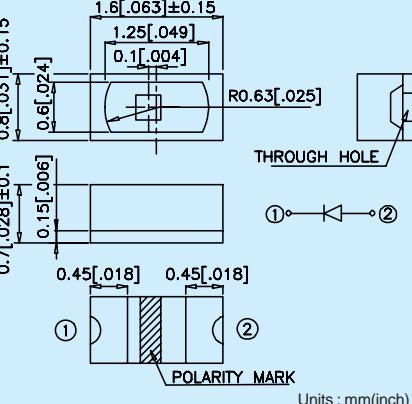
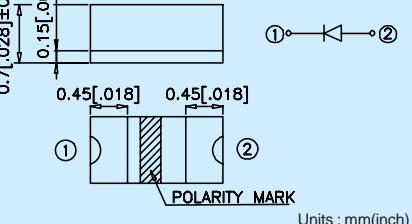
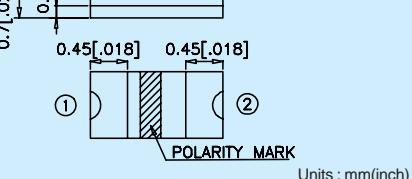
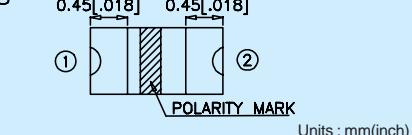
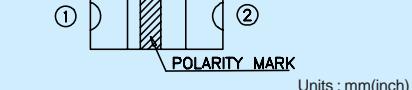


Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle	Dimension
				Min.	Typ.		
KPEFA-3029SEEVGEPBGC	InGaAlP	621		110	280		3.0mm x 2.9mm x 2.0mm (Right Angle,Full Color)
	InGaN	525	water clear	70	200	120°	 VG-E SE-E PB-G
	InGaN	470		70	130		POLARITY MARK

Units : mm(inch)
Tolerance : ±0.1(0.004)

KPF-3236SRSGPBC-PRV	GaAlAs	640		36	70		3.2mm x 3.6mm x 1.1mm (Full Color)
	GaP	568	water clear	2.6	12	120°	
	InGaN	470		18	60		POLARITY MARK
KPF-3236SURKVGPC	InGaAlP	635		70	150		
	InGaN	525	water clear	50	100	120°	SURK VG MGK
	InGaN	470		18	60		PB PB
KPF-3236SURKMGKPBC	InGaAlP	635		70	150		
	InGaAlP	570	water clear	18	60	120°	1.1 (0.43) MAX.
	InGaN	470		18	60		0.5 (0.02)

Units : mm(inch)
Tolerance : ±0.2(0.008)

KPHK-1608SURC	InGaAlP	628	water clear	110	250	90°	1.6mm x 0.8mm x 0.7mm (0603)
KPHK-1608SURCK	InGaAlP	635	water clear	70	200	90°	
KPHK-1608SEC	InGaAlP	601	water clear	110	280	90°	THROUGH HOLE
KPHK-1608SECK	InGaAlP	601	water clear	70	250	90°	① o---o ②
KPHK-1608SYC	InGaAlP	588	water clear	50	150	90°	
KPHK-1608SYCK	InGaAlP	590	water clear	36	120	90°	① o---o ②
KPHK-1608MGC	InGaAlP	568	water clear	36	90	90°	
KPHK-1608MGCK	InGaAlP	570	water clear	36	80	90°	① o---o ②
KPHK-1608TGC	InGaN	505	water clear	70	150	90°	
KPHK-1608VGC	InGaN	525	water clear	70	180	90°	① o---o ②
KPHK-1608QBC-C	GaN	470	water clear	50	100	90°	
KPHK-1608PBC	InGaN	470	water clear	36	70	90°	① o---o ②

Units : mm(inch)
Tolerance : ±0.1(0.004)

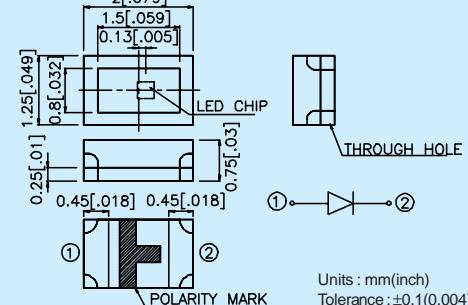
NOTE:

1.KP series custom-made is available upon request.

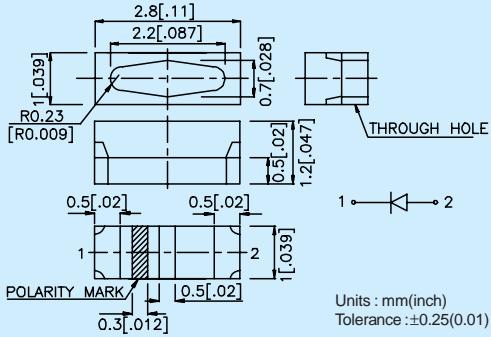


Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 201/2	Dimension
				Min.	Typ.		

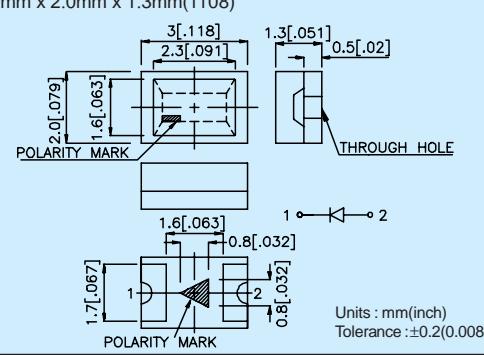
KPTK-2012SURC	InGaAlP	628	water clear	110	250	100°	2.0mm x 1.25mm x 0.75mm (0805)
KPTK-2012SURCK	InGaAlP	635	water clear	70	200	100°	
KPTK-2012SEC	InGaAlP	601	water clear	110	280	100°	
KPTK-2012SECK	InGaAlP	601	water clear	70	230	100°	
KPTK-2012SYC	InGaAlP	588	water clear	50	120	100°	
KPTK-2012SYCK	InGaAlP	590	water clear	36	100	100°	
KPTK-2012MGC	InGaAlP	568	water clear	36	80	100°	
KPTK-2012MGCK	InGaAlP	570	water clear	36	70	100°	
KPTK-2012TGC	InGaN	505	water clear	70	150	100°	
KPTK-2012VGC	InGaN	525	water clear	70	200	100°	
KPTK-2012QBC-C	GaN	470	water clear	36	100	100°	
KPTK-2012PBC	InGaN	470	water clear	36	70	100°	



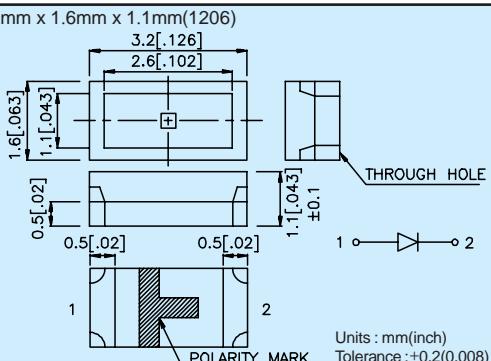
KPKA-2810SURC	InGaAlP	628	water clear	70	220	90°	2.8mm x 1.0mm x 1.2mm (1104 Right Angle)
KPKA-2810SURCK	InGaAlP	635	water clear	50	170	90°	
KPKA-2810SEC	InGaAlP	601	water clear	110	300	90°	
KPKA-2810SECK	InGaAlP	601	water clear	70	250	90°	
KPKA-2810SYC	InGaAlP	588	water clear	50	150	90°	
KPKA-2810SYCK	InGaAlP	590	water clear	36	120	90°	
KPKA-2810MGC	InGaAlP	568	water clear	36	90	90°	
KPKA-2810MGCK	InGaAlP	570	water clear	36	80	90°	
KPKA-2810TGC	InGaN	505	water clear	70	150	90°	
KPKA-2810VGC	InGaN	525	water clear	70	200	90°	
KPKA-2810QBC-C	GaN	470	water clear	50	100	90°	
KPKA-2810PBC	InGaN	470	water clear	36	70	90°	



KPK-3020SURC	InGaAlP	628	water clear	70	230	120°	3.0mm x 2.0mm x 1.3mm(1108)
KPK-3020SURCK	InGaAlP	635	water clear	50	200	120°	
KPK-3020SEC	InGaAlP	601	water clear	110	300	120°	
KPK-3020SECK	InGaAlP	601	water clear	70	150	120°	
KPK-3020SYC	InGaAlP	588	water clear	50	150	120°	
KPK-3020SYCK	InGaAlP	590	water clear	36	120	120°	
KPK-3020MGC	InGaAlP	568	water clear	36	90	120°	
KPK-3020MGCK	InGaAlP	570	water clear	36	80	120°	
KPK-3020TGC	InGaN	505	water clear	70	150	120°	
KPK-3020VGC	InGaN	525	water clear	70	150	120°	
KPK-3020QBC-C	GaN	470	water clear	50	120	120°	
KPK-3020PBC	InGaN	470	water clear	18	60	120°	



KPK-3216SURC	InGaAlP	628	water clear	110	250	90°	3.2mm x 1.6mm x 1.1mm(1206)
KPK-3216SURCK	InGaAlP	635	water clear	70	200	90°	
KPK-3216SEC	InGaAlP	601	water clear	110	300	90°	
KPK-3216SECK	InGaAlP	601	water clear	70	250	90°	
KPK-3216SYC	InGaAlP	588	water clear	50	150	90°	
KPK-3216SYCK	InGaAlP	590	water clear	36	120	90°	
KPK-3216MGC	InGaAlP	568	water clear	36	90	90°	
KPK-3216MGCK	InGaAlP	570	water clear	36	80	90°	
KPK-3216TGC	InGaN	505	water clear	70	180	90°	
KPK-3216VGC	InGaN	525	water clear	70	220	90°	
KPK-3216QBC-C	GaN	470	water clear	50	100	90°	
KPK-3216PBC	InGaN	470	water clear	36	70	90°	

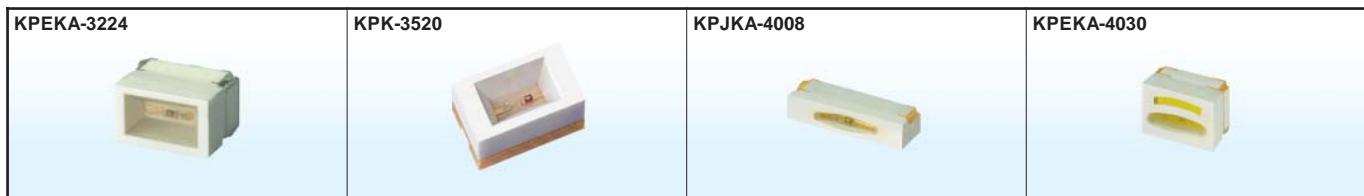


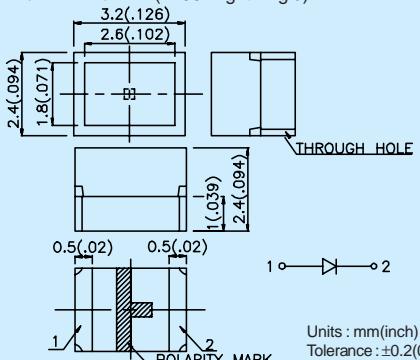
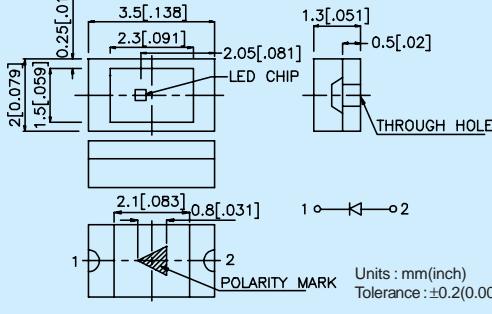
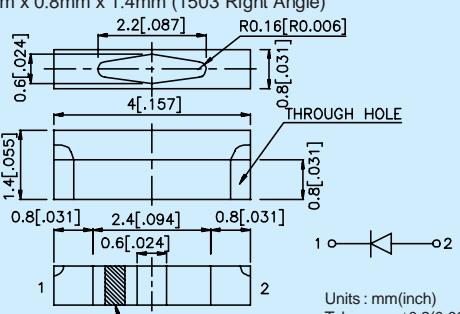
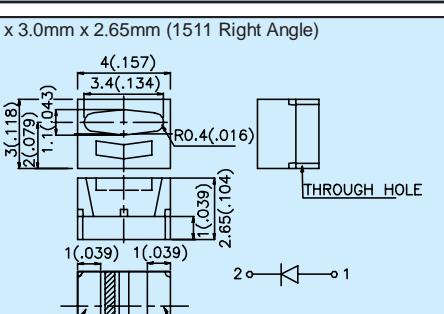
NOTE:

1.KP series custom-made is available upon request.

SURFACE MOUNT LED LAMPS

Kingbright



Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 281/2	Dimension
				Min.	Typ.		
KPEKA-3224SURC	InGaAlP	628	water clear	110	280	90°	 <p>3.2mm x 2.4mm x 2.4mm (1209 Right Angle)</p> <p>THROUGH HOLE</p> <p>POLARITY MARK</p> <p>Units : mm(inch) Tolerance :±0.2(0.008)</p>
KPEKA-3224SURCK	InGaAlP	635	water clear	110	250	90°	
KPEKA-3224SEC	InGaAlP	601	water clear	110	300	90°	
KPEKA-3224SECK	InGaAlP	601	water clear	110	250	90°	
KPEKA-3224SYC	InGaAlP	588	water clear	50	120	90°	
KPEKA-3224SYCK	InGaAlP	590	water clear	50	90	90°	
KPEKA-3224SGC	GaP	568	water clear	7	20	90°	
KPEKA-3224MGC	InGaAlP	568	water clear	50	110	90°	
KPEKA-3224CGCK	InGaAlP	570	water clear	36	60	90°	
KPEKA-3224QBC-C	GaN	470	water clear	50	100	90°	
KPEKA-3224PBC	InGaN	470	water clear	50	100	90°	
KPK-3520SURC	InGaAlP	628	water clear	70	230	120°	 <p>3.5mm x 2.0mm x 1.3mm (1308)</p> <p>LED CHIP</p> <p>THROUGH HOLE</p> <p>POLARITY MARK</p> <p>Units : mm(inch) Tolerance :±0.2(0.008)</p>
KPK-3520SURCK	InGaAlP	635	water clear	50	200	120°	
KPK-3520SEC	InGaAlP	601	water clear	110	300	120°	
KPK-3520SECK	InGaAlP	601	water clear	70	250	120°	
KPK-3520SYC	InGaAlP	588	water clear	50	150	120°	
KPK-3520SYCK	InGaAlP	590	water clear	36	120	120°	
KPK-3520MGC	InGaAlP	568	water clear	36	90	120°	
KPK-3520MGCK	InGaAlP	570	water clear	36	80	120°	
KPK-3520TGC	InGaN	505	water clear	70	150	120°	
KPK-3520VGC	InGaN	525	water clear	70	120	120°	
KPK-3520QBC-C	GaN	470	water clear	50	120	120°	
KPK-3520PBC	InGaN	470	water clear	18	60	120°	
KPJKA-4008SURC	InGaAlP	628	water clear	70	220	90°	 <p>4.0mm x 0.8mm x 1.4mm (1503 Right Angle)</p> <p>THROUGH HOLE</p> <p>POLARITY MARK</p> <p>Units : mm(inch) Tolerance :±0.2(0.008)</p>
KPJKA-4008SEC	InGaAlP	601	water clear	110	250	90°	
KPJKA-4008SYC	InGaAlP	588	water clear	50	100	90°	
KPJKA-4008MGC	InGaAlP	568	water clear	36	100	90°	
KPJKA-4008MGCK	InGaAlP	570	water clear	36	80	90°	
KPJKA-4008TGC	InGaN	505	water clear	50	150	90°	
KPJKA-4008VGC	InGaN	525	water clear	70	200	90°	
KPJKA-4008QBC-C	GaN	470	water clear	50	100	90°	
KPJKA-4008PBC	InGaN	470	water clear	36	80	90°	
KPEKA-4030SURC	InGaAlP	628	water clear	70	250	90°	
KPEKA-4030SEC	InGaAlP	601	water clear	110	320	90°	 <p>4.0mm x 3.0mm x 2.65mm (1511 Right Angle)</p> <p>THROUGH HOLE</p> <p>POLARITY MARK</p> <p>Units : mm(inch) Tolerance :±0.2(0.008)</p>
KPEKA-4030SYC	InGaAlP	588	water clear	50	120	90°	
KPEKA-4030MGC	InGaAlP	568	water clear	36	100	90°	
KPEKA-4030TGC	InGaN	505	water clear	50	100	90°	
KPEKA-4030VGC	InGaN	525	water clear	70	220	90°	
KPEKA-4030QBC-C	GaN	470	water clear	36	80	90°	
KPEKA-4030PBC	InGaN	470	water clear	36	80	90°	

NOTE:

1.KP series custom-made is available upon request.



Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 201/2	Dimension
				Min.	Typ.		
KPKA-4110SURC	InGaAlP	628	water clear	70	220	90°	4.1mm x 1.0mm x 1.52mm (1604 Right Angle)
KPKA-4110SEC	InGaAlP	601	water clear	70	250	90°	
KPKA-4110SYC	InGaAlP	588	water clear	50	100	90°	
KPKA-4110MGC	InGaAlP	568	water clear	36	100	90°	
KPKA-4110MGCK	InGaAlP	570	water clear	36	80	90°	
KPKA-4110TGC	InGaN	505	water clear	36	100	90°	
KPKA-4110VGC	InGaN	525	water clear	50	150	90°	
KPKA-4110QBC-C	GaN	470	water clear	50	100	90°	
KPKA-4110PBC	InGaN	470	water clear	36	80	90°	

KPTKA-5614SURC	InGaAlP	628	water clear	110	300	90°	5.6mm x 1.4mm x 1.0mm (2205 Right Angle)
KPTKA-5614SEC	InGaAlP	601	water clear	180	450	90°	
KPTKA-5614SYC	InGaAlP	588	water clear	50	150	90°	
KPTKA-5614MGC	InGaAlP	568	water clear	50	100	90°	
KPTKA-5614MGCK	InGaAlP	570	water clear	36	80	90°	
KPTKA-5614TGC	InGaN	505	water clear	70	150	90°	
KPTKA-5614VGC	InGaN	525	water clear	70	200	90°	
KPTKA-5614QBC-C	GaN	470	water clear	50	100	90°	
KPTKA-5614PBC	InGaN	470	water clear	36	80	90°	

KPKB-3025ESGC	GaAsP/GaP	625	water clear	10	20	120°	3.0mm x 2.5mm x 1.3mm (1109 Bi-Color)
	GaP	568		10	20		
KPKB-3025YSGC	GaAsP/GaP	588	water clear	2.6	8	120°	
	GaP	568		10	20		
KPKB-3025SURKMGKC	InGaAlP	635	water clear	70	150	120°	
	InGaAlP	570		10	50		
KPKB-3025SURKSYKC	InGaAlP	635	water clear	70	150	120°	
	InGaAlP	590		18	50		

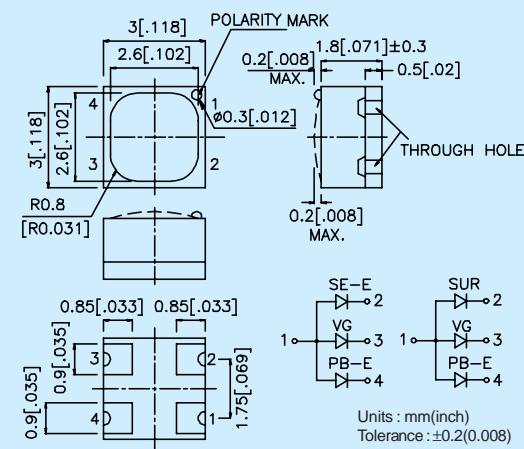
NOTE:

1.KP series custom-made is available upon request.

SURFACE MOUNT LED LAMPS

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KPKF-3030		KA-3020		KA-3022-4.5SF	
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Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 281/2	Dimension
				Min.	Typ.		
KPKF-3030SEEVGPBEC	InGaAlP	621		180	400		3.0mm x 3.0mm x 1.8mm (Full Color)
	InGaN	525	water clear	110	250	100°	
	InGaN	470		50	120		
KPKF-3030SURVGPBEC	InGaAlP	628		110	220		
	InGaN	525	water clear	110	250	100°	
	InGaN	470		50	120		

KA-3020EC	GaAsP/GaP	625	water clear	7	20	90°	3.0mm x 2.0mm (1208)
KA-3020SRC	GaAlAs	640	water clear	36	120	90°	
KA-3020SURC	InGaAlP	628	water clear	110	230	90°	
KA-3020SURCK	InGaAlP	635	water clear	70	200	90°	
KA-3020SEC	InGaAlP	601	water clear	110	300	90°	
KA-3020SECK	InGaAlP	601	water clear	70	150	90°	
KA-3020YC	GaAsP/GaP	588	water clear	4	15	90°	
KA-3020SYC	InGaAlP	588	water clear	50	120	90°	
KA-3020SYCK	InGaAlP	590	water clear	36	100	90°	
KA-3020SGC	GaP	568	water clear	7	30	90°	
KA-3020MGC	InGaAlP	568	water clear	36	80	90°	
KA-3020CGCK	InGaAlP	570	water clear	18	60	90°	
KA-3020PBC	InGaN	470	water clear	18	60	90°	

KA-3022EC-4.5SF	GaAsP/GaP	625	water clear	7	30	90°	3.0mm x 2.2mm
KA-3022SRC-4.5SF	GaAlAs	640	water clear	36	150	90°	
KA-3022YC-4.5SF	GaAsP/GaP	588	water clear	4	10	90°	
KA-3022SYC-4.5SF	InGaAlP	588	water clear	50	120	90°	
KA-3022SGC-4.5SF	GaP	568	water clear	7	20	90°	

NOTE:
1.KP series custom-made is available upon request.



Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 201/2	Dimension
				Min.	Typ.		

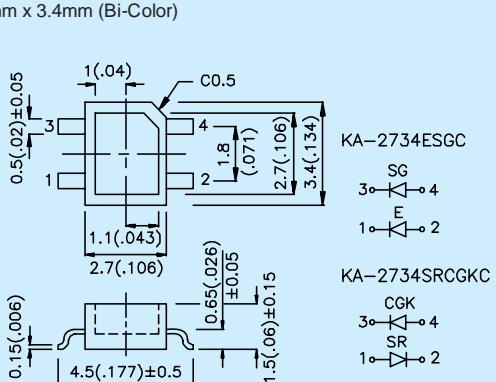
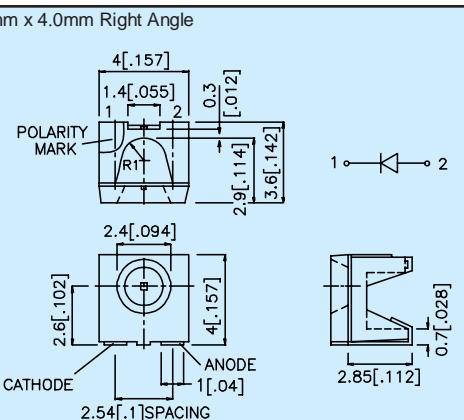
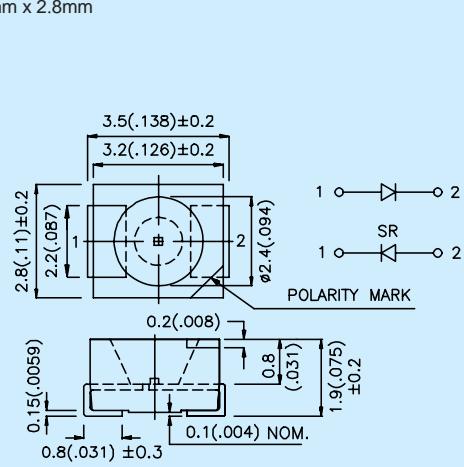
KA-3528EC	GaAsP/GaP	625	water clear	7	30	120°	3.5mm x 2.8mm
KA-3528SRC	GaAlAs	640	water clear	50	150	120°	
KA-3528SURC	InGaAlP	628	water clear	110	230	120°	
KA-3528SURCK	InGaAlP	635	water clear	70	200	120°	
KA-3528SEC	InGaAlP	601	water clear	180	350	120°	
KA-3528SECK	InGaAlP	601	water clear	70	300	120°	
KA-3528YC	GaAsP/GaP	588	water clear	4	15	120°	
KA-3528SYC	InGaAlP	588	water clear	36	120	120°	
KA-3528SYCK	InGaAlP	590	water clear	36	100	120°	
KA-3528SGC	GaP	568	water clear	10	25	120°	
KA-3528CGCK	InGaAlP	570	water clear	18	60	120°	
KA-3528MGC	InGaAlP	568	water clear	70	150	120°	
KA-3528VGC	InGaN	525	water clear	110	220	120°	
KA-3528VGC-E	InGaN	525	water clear	110	280	120°	
KA-3528PBC	InGaN	470	water clear	18	60	120°	
KA-3528PBC-E	InGaN	470	water clear	50	120	120°	

KA-4040SRC	GaAlAs	640	water clear	50	120	90°	4.0mm x 4.0mm Right Angle
KA-4040SURC	InGaAlP	628	water clear	70	200	90°	
KA-4040SEC	InGaAlP	601	water clear	180	350	90°	
KA-4040SECK	InGaAlP	601	water clear	70	200	90°	
KA-4040SYC	InGaAlP	588	water clear	50	120	90°	
KA-4040CGCK	InGaAlP	570	water clear	36	70	90°	
KA-4040MGC	InGaAlP	568	water clear	50	100	90°	
KA-4040PGC	GaP	555	water clear	1.6	6	90°	

KA-2734ESGC	GaAsP/GaP	625	water clear	7	30	120°	2.7mm x 3.4mm (Bi-Color)
	GaP	568		7	30		
KA-2734SRCGKC	GaAlAs	640	water clear	70	150	120°	
	InGaAlP	570		36	60		

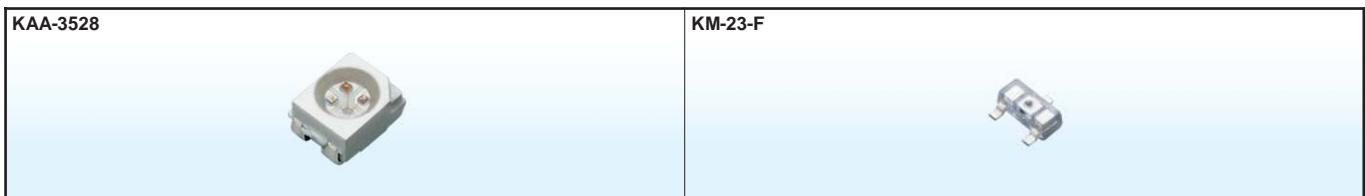
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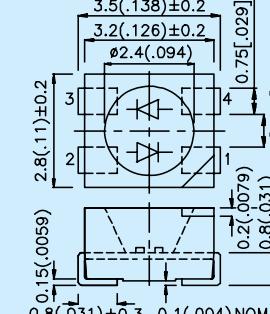
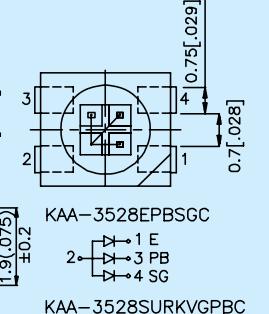
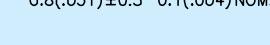
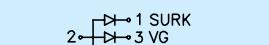
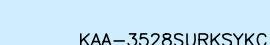
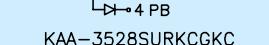
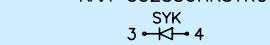
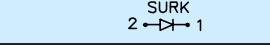
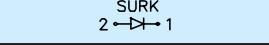
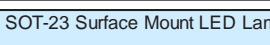
- All dimensions are in millimeters(inches).
- Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.

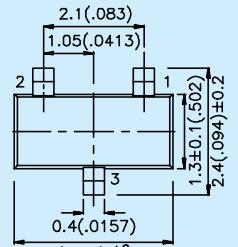
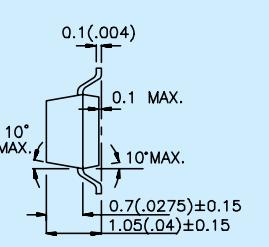
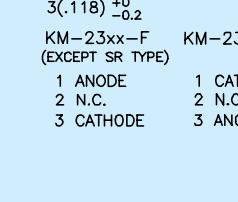
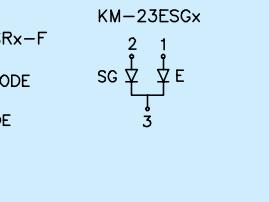
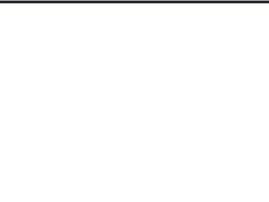


SURFACE MOUNT LED LAMPS

Kingbright



Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 281/2	Dimension
				Min.	Typ.		
KAA-3528SURKSYKC	InGaAlP	635	water clear	70	200	120°	3.5mm x 2.8mm KAA-3528SURKSYKC KAA-3528SURKCGKC 
	InGaAlP	590		18	100		KAA-3528EPBSGCC KAA-3528SURKVGPBC 
KAA-3528SURKCGKC	InGaAlP	635	water clear	70	200	120°	
	InGaAlP	570		18	80		
KAA-3528EPBSGC	GaAsP/GaP	625	water clear	10	30	120°	
	InGaN	470		36	70		
	GaP	568		4	20		
KAA-3528SURKVGPBC	InGaAlP	635	water clear	70	200	120°	
	InGaN	525		70	200		
	InGaN	470		36	70		

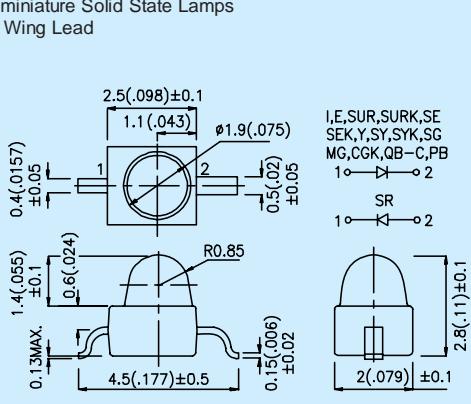
KM-23ID-F	GaAsP/GaP	625	red diffused	4	15	140°	SOT-23 Surface Mount LED Lamp (3mm x 1.3mm)
KM-23EC-F	GaAsP/GaP	625	water clear	4	15	140°	
KM-23SRD-F	GaAlAs	640	red diffused	36	70	140°	
KM-23SRC-F	GaAlAs	640	water clear	36	70	140°	
KM-23YD-F	GaAsP/GaP	588	yellow diffused	1.6	5	140°	
KM-23YC-F	GaAsP/GaP	588	water clear	1.6	5	140°	
KM-23SYD-F	InGaAlP	588	yellow diffused	50	100	140°	
KM-23SYC-F	InGaAlP	588	water clear	50	100	140°	
KM-23CGCK-F	InGaAlP	570	water clear	18	40	140°	
KM-23SGC-F	GaP	568	water clear	4	15	140°	
KM-23ESGW	GaAsP/GaP	625	white diffused	4	15	140°	KM-23xx-F (EXCEPT SR TYPE)
	GaP	568		4	15	140°	1 ANODE 2 N.C. 3 CATHODE
KM-23ESGC	GaAsP/GaP	625	water clear	4	15	140°	KM-23SRx-F 1 CATHODE 2 N.C. 3 ANODE
	GaP	568		4	15	140°	KM-23ESGx SG E 2 1 3

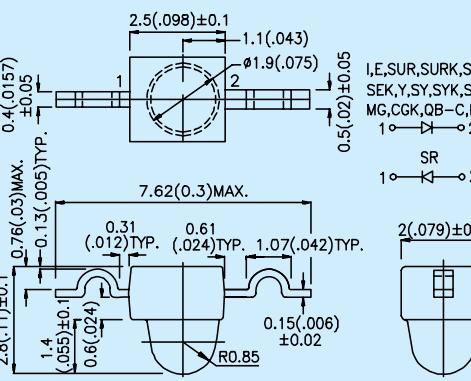
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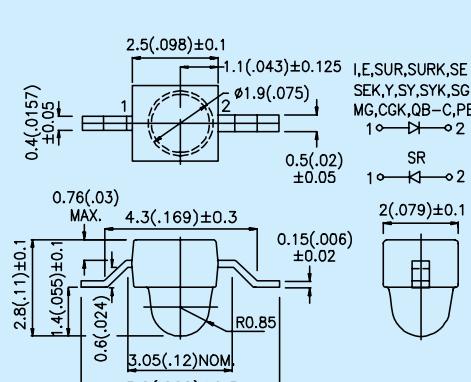
- All dimensions are in millimeters(inches).
- Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.



Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 201/2	Dimension
				Min.	Typ.		

KM2520ID03	GaAsP/GaP	625	red diffused	7	30	40°	Subminiature Solid State Lamps Gull Wing Lead 
KM2520EC03	GaAsP/GaP	625	water clear	10	70	20°	
KM2520SRD03	GaAlAs	640	red diffused	50	150	40°	
KM2520SRC03	GaAlAs	640	water clear	110	600	20°	
KM2520SURC03	InGaAIP	628	water clear	280	1000	20°	
KM2520SURCK03	InGaAIP	635	water clear	180	650	20°	
KM2520SEC03	InGaAIP	601	water clear	480	1300	20°	
KM2520SECK03	InGaAIP	601	water clear	180	700	20°	
KM2520YD03	GaAsP/GaP	588	yellow diffused	2.6	10	40°	
KM2520YC03	GaAsP/GaP	588	water clear	10	30	20°	
KM2520SYC03	InGaAIP	588	water clear	110	700	20°	
KM2520SYCK03	InGaAIP	590	water clear	70	300	20°	
KM2520SGD03	GaP	568	green diffused	2.6	10	40°	
KM2520SGC03	GaP	568	water clear	36	80	20°	
KM2520MGC03	InGaAIP	568	water clear	280	600	20°	
KM2520CGCK03	InGaAIP	570	water clear	110	400	20°	
KM2520QBC-C03	GaN	470	water clear	110	400	20°	
KM2520PBC03	InGaN	470	water clear	110	250	20°	

KM2520ID08	GaAsP/GaP	625	red diffused	7	30	40°	Subminiature Solid State Lamps Yoke Lead 
KM2520EC08	GaAsP/GaP	625	water clear	10	70	20°	
KM2520SRD08	GaAlAs	640	red diffused	50	150	40°	
KM2520SRC08	GaAlAs	640	water clear	110	600	20°	
KM2520SURC08	InGaAIP	628	water clear	280	1000	20°	
KM2520SURCK08	InGaAIP	635	water clear	180	650	20°	
KM2520SEC08	InGaAIP	601	water clear	480	1300	20°	
KM2520SECK08	InGaAIP	601	water clear	180	700	20°	
KM2520YD08	GaAsP/GaP	588	yellow diffused	2.6	10	40°	
KM2520YC08	GaAsP/GaP	588	water clear	10	30	20°	
KM2520SYC08	InGaAIP	588	water clear	110	700	20°	
KM2520SYCK08	InGaAIP	590	water clear	70	300	20°	
KM2520SGD08	GaP	568	green diffused	2.6	10	40°	
KM2520SGC08	GaP	568	water clear	36	80	20°	
KM2520MGC08	InGaAIP	568	water clear	280	600	20°	
KM2520CGCK08	InGaAIP	570	water clear	110	400	20°	
KM2520QBC-C08	GaN	470	water clear	110	400	20°	
KM2520PBC08	InGaN	470	water clear	110	250	20°	

KM2520ID09	GaAsP/GaP	625	red diffused	7	30	40°	Subminiature Solid State Lamps Z-Bend Lead 
KM2520EC09	GaAsP/GaP	625	water clear	10	70	20°	
KM2520SRD09	GaAlAs	640	red diffused	50	150	40°	
KM2520SRC09	GaAlAs	640	water clear	110	600	20°	
KM2520SURC09	InGaAIP	628	water clear	280	1000	20°	
KM2520SURCK09	InGaAIP	635	water clear	180	650	20°	
KM2520SEC09	InGaAIP	601	water clear	480	1300	20°	
KM2520SECK09	InGaAIP	601	water clear	180	700	20°	
KM2520YD09	GaAsP/GaP	588	yellow diffused	2.6	10	40°	
KM2520YC09	GaAsP/GaP	588	water clear	10	30	20°	
KM2520SYC09	InGaAIP	588	water clear	110	700	20°	
KM2520SYCK09	InGaAIP	590	water clear	70	300	20°	
KM2520SGD09	GaP	568	green diffused	2.6	10	40°	
KM2520SGC09	GaP	568	water clear	36	80	20°	
KM2520MGC09	InGaAIP	568	water clear	280	600	20°	
KM2520CGCK09	InGaAIP	570	water clear	110	400	20°	
KM2520QBC-C09	GaN	470	water clear	110	400	20°	
KM2520PBC09	InGaN	470	water clear	110	250	20°	

NOTES:

- All dimensions are in millimeters(inches).
- Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.



Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 281/2	Dimension
				Min.	Typ.		

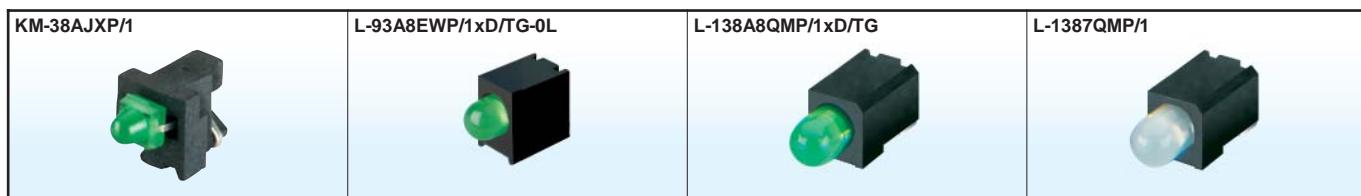
KM-27ID-03	GaAsP/GaP	625	red diffused	7	30	40°	Subminiature Solid State Lamps Gull Wing Lead
KM-27EC-03	GaAsP/GaP	625	water clear	10	70	20°	
KM-27SRD-03	GaAlAs	640	red diffused	50	150	40°	
KM-27SRC-03	GaAlAs	640	water clear	110	600	20°	
KM-27SURC-03	InGaAlP	628	water clear	280	1000	20°	
KM-27SURCK-03	InGaAlP	635	water clear	180	650	20°	
KM-27SEC-03	InGaAlP	601	water clear	480	1300	20°	
KM-27SECK-03	InGaAlP	601	water clear	180	700	20°	
KM-27YD-03	GaAsP/GaP	588	yellow diffused	2.6	10	40°	
KM-27YC-03	GaAsP/GaP	588	water clear	10	30	20°	
KM-27SYC-03	InGaAlP	588	water clear	110	700	20°	
KM-27SYCK-03	InGaAlP	590	water clear	70	300	20°	
KM-27SGD-03	GaP	568	green diffused	2.6	10	40°	
KM-27SGC-03	GaP	568	water clear	36	80	20°	
KM-27MGC-03	InGaAlP	568	water clear	280	600	20°	
KM-27CGCK-03	InGaAlP	570	water clear	110	400	20°	
KM-27QBC-C-03	GaN	470	water clear	110	400	20°	
KM-27PBC-03	InGaN	470	water clear	110	250	20°	

KM-27ID-08	GaAsP/GaP	625	red diffused	7	30	40°	Subminiature Solid State Lamps Yoke Lead
KM-27EC-08	GaAsP/GaP	625	water clear	10	70	20°	
KM-27SRD-08	GaAlAs	640	red diffused	50	150	40°	
KM-27SRC-08	GaAlAs	640	water clear	110	600	20°	
KM-27SURC-08	InGaAlP	628	water clear	280	1000	20°	
KM-27SURCK-08	InGaAlP	635	water clear	180	650	20°	
KM-27SEC-08	InGaAlP	601	water clear	480	1300	20°	
KM-27SECK-08	InGaAlP	601	water clear	180	700	20°	
KM-27YD-08	GaAsP/GaP	588	yellow diffused	2.6	10	40°	
KM-27YC-08	GaAsP/GaP	588	water clear	10	30	20°	
KM-27SYC-08	InGaAlP	588	water clear	110	700	20°	
KM-27SYCK-08	InGaAlP	590	water clear	70	300	20°	
KM-27SGD-08	GaP	568	green diffused	2.6	10	40°	
KM-27SGC-08	GaP	568	water clear	36	80	20°	
KM-27MGC-08	InGaAlP	568	water clear	280	600	20°	
KM-27CGCK-08	InGaAlP	570	water clear	110	400	20°	
KM-27QBC-C-08	GaN	470	water clear	110	400	20°	
KM-27PBC-08	InGaN	470	water clear	110	250	20°	

KM-27ID-09	GaAsP/GaP	625	red diffused	7	30	40°	Subminiature Solid State Lamps Z-Bend Lead
KM-27EC-09	GaAsP/GaP	625	water clear	10	70	20°	
KM-27SRD-09	GaAlAs	640	red diffused	50	150	40°	
KM-27SRC-09	GaAlAs	640	water clear	110	600	20°	
KM-27SURC-09	InGaAlP	628	water clear	280	1000	20°	
KM-27SURCK-09	InGaAlP	635	water clear	180	650	20°	
KM-27SEC-09	InGaAlP	601	water clear	480	1300	20°	
KM-27SECK-09	InGaAlP	601	water clear	180	700	20°	
KM-27YD-09	GaAsP/GaP	588	yellow diffused	2.6	10	40°	
KM-27YC-09	GaAsP/GaP	588	water clear	10	30	20°	
KM-27SYC-09	InGaAlP	588	water clear	110	700	20°	
KM-27SYCK-09	InGaAlP	590	water clear	70	300	20°	
KM-27SGD-09	GaP	568	green diffused	2.6	10	40°	
KM-27SGC-09	GaP	568	water clear	36	80	20°	
KM-27MGC-09	InGaAlP	568	water clear	280	600	20°	
KM-27CGCK-09	InGaAlP	570	water clear	110	400	20°	
KM-27QBC-C-09	GaN	470	water clear	110	400	20°	
KM-27PBC-09	InGaN	470	water clear	110	250	20°	

NOTES:

- All dimensions are in millimeters(inches).
- Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.



Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @10mA *20mA		Viewing Angle 201/2	Dimension
				Min.	Typ.		

KM-38AJXP/1ID	GaAsP/GaP	625	red diffused	*7	*30	40°	<p>Right Angle LED Indicator</p>
KM-38AJXP/1SEDK	InGaAlP	601	orange diffused	*380	*700	40°	
KM-38AJXP/1SGD	GaP	568	green diffused	*2.6	*10	40°	
KM-38AJXP/1CGDK	InGaAlP	570	green diffused	*18	*50	40°	
KM-38AJXP/1YD	GaAsP/GaP	588	yellow diffused	*2.6	*10	40°	
KM-38AJXP/1SYDK	InGaAlP	590	yellow diffused	*18	*50	40°	
KM-38AJXP/1SURDK	InGaAlP	635	red diffused	*180	*380	40°	

L-93A8EWP/1ID/TG-0L	GaAsP/GaP	625	red diffused	12	25	60°	<p>T-1 (3mm) Right Angle</p>
L-93A8EWP/1SRD/TG-0L	GaAlAs	640	red diffused	*110	*280	60°	
L-93A8EWP/1YD/TG-0L	GaAsP/GaP	588	yellow diffused	5	12	60°	
L-93A8EWP/1GD/TG-0L	GaP	568	green diffused	8	20	60°	

L-138A8QMP/1ID/TG	GaAsP/GaP	625	red diffused	12	20	60°	<p>3.4mm Right Angle</p>
L-138A8QMP/1SRD/TG	GaAlAs	640	red diffused	*110	*250	60°	
L-138A8QMP/1YD/TG	GaAsP/GaP	588	yellow diffused	8	15	60°	
L-138A8QMP/1GD/TG	GaP	568	green diffused	8	15	60°	

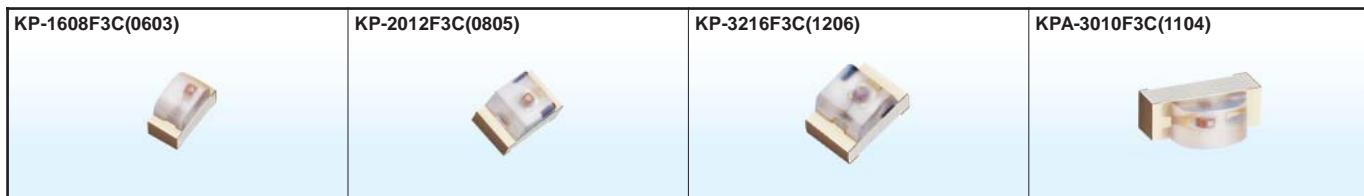
L-1387QMP/1EGW	GaAsP/GaP	625	white diffused	*7	*20	60°	<p>3.4mm Right Angle</p>	
	GaP	568		*7	*20			
L-1387QMP/1GYW	GaP	568	white diffused	*7	*20	60°		
	GaAsP/GaP	588		*4	*10			
L-1387QMP/1SURKCGKW	InGaAlP	635	white diffused	*70	*300	60°		
	InGaAlP	570		*50	*120			
L-1387QMP/1CGKPBW	InGaAlP	570	white diffused	*50	*120	60°		
	InGaN	470		*36	*150			

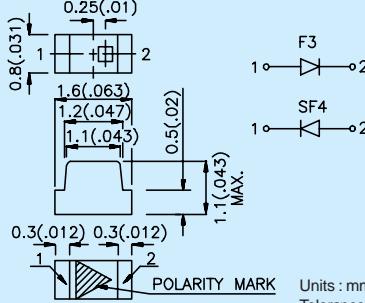
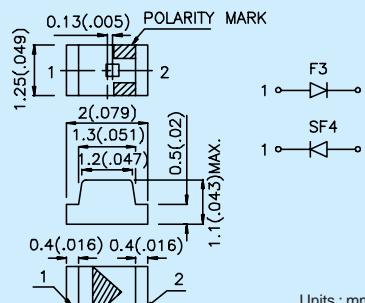
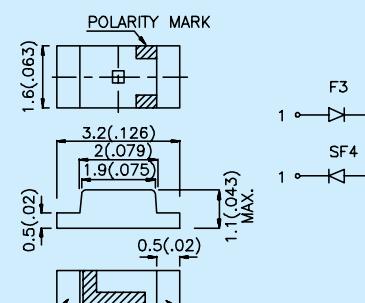
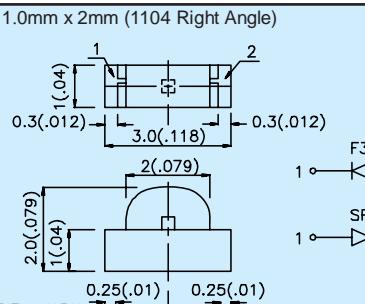
NOTES:

- All dimensions are in millimeters(inches).
- Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.

SMD INFRARED EMITTING DIODES

Kingbright



Part No.	Material	λ_P (nm)	Lens Type	Po (mW/sr) @20mA		Viewing Angle 2θ/1/2	Dimension
				Min.	Typ.		
KP-1608F3C	GaAs	940	water clear	0.4	1.2	120°	1.6mm x 0.8mm x 1.1mm (0603)
							 Units : mm(inch) Tolerance : ±0.1(0.004)
KP-1608SF4C	GaAlAs	880	water clear	0.4	1	120°	2.0mm x 1.25mm x 1.1mm (0805)
							 Units : mm(inch) Tolerance : ±0.1(0.004)
KP-2012F3C	GaAs	940	water clear	0.4	1.2	120°	3.2mm x 1.6mm x 1.1mm (1206)
							 Units : mm(inch) Tolerance : ±0.2(0.008)
KP-2012SF4C	GaAlAs	880	water clear	0.4	1	120°	3.0mm x 1.0mm x 2mm (1104 Right Angle)
							 Units : mm(inch) Tolerance : ±0.15(0.006)
KPA-3010F3C	GaAs	940	water clear	0.4	1.2	120°	3.0mm x 1.0mm x 2mm (1104 Right Angle)
							 Units : mm(inch) Tolerance : ±0.15(0.006)
KPA-3010SF4C	GaAlAs	880	water clear	0.4	1	120°	3.0mm x 1.0mm x 2mm (1104 Right Angle)

NOTES:

1. All dimensions are in millimeters(inches).
2. Tolerance is ±0.25mm(0.01") unless otherwise noted.

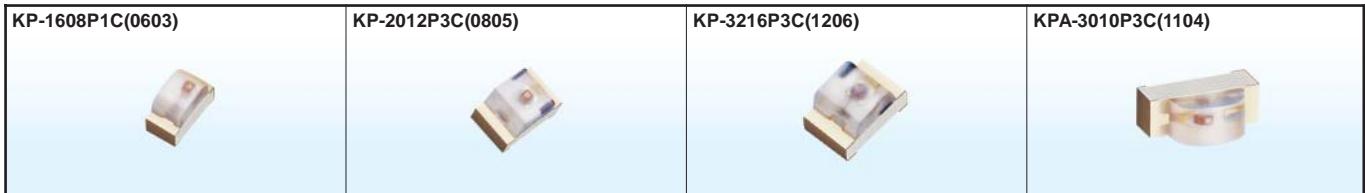


Part No.	Material	λ_P (nm)	Lens Type	Po (mW/sr) @20mA *50mA			Viewing Angle 20°/2	Dimension
				Min.	Typ.			
KPL-3015F3C	GaAs	940	water clear	0.4	1.2	70°		3.0mm x 1.5mm x 1.4mm (1106)
KPL-3015SF4C	GaAlAs	880	water clear	0.4	1	70°		
KA-3528F3C	GaAs	940	water clear	1.6	3	120°		3.5mm x 2.8mm
KA-3528SF4C	GaAlAs	880	water clear	*2.6	*8	120°		
KM2520F3C03	GaAs	940	water clear	0.4	3	120°		2mm Subminiature IR Emitter
KM2520SF4C03	GaAlAs	880	water clear	*2.6	*8	20°		

Units : mm(inch)
Tolerance : ±0.2(0.008)

NOTES:

- All dimensions are in millimeters(inches).
- Tolerance is ±0.25mm(0.01") unless otherwise noted.

**PHOTOTRANSISTORS****1.6mm x 0.8mm x 1.1mm (0603)**

KP-1608P1C WATER CLEAR LENS

KP-1608P1BT BLUE TRANSPARENT LENS

2.0mm x 1.25mm x 1.1mm (0805)

KP-2012P3C WATER CLEAR LENS

KP-2012P3BT BLUE TRANSPARENT LENS

3.2mm x 1.6mm x 1.1mm (1206)

KP-3216P3C WATER CLEAR LENS

KP-3216P3BT BLUE TRANSPARENT LENS

3.0mm x 1.0mm x 2.0mm (1104)

KPA-3010P3C WATER CLEAR LENS

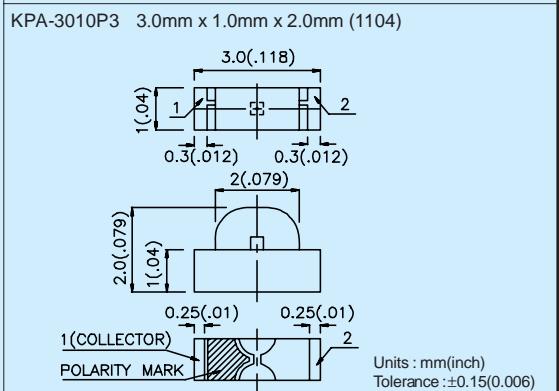
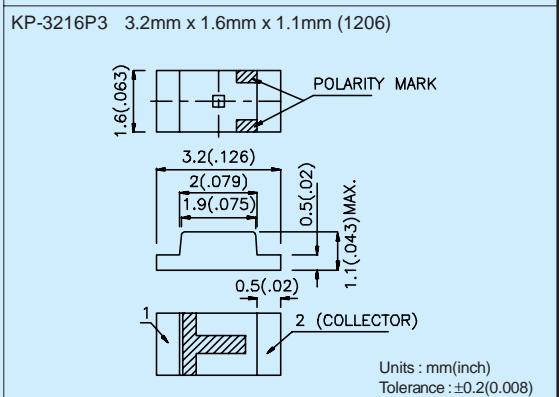
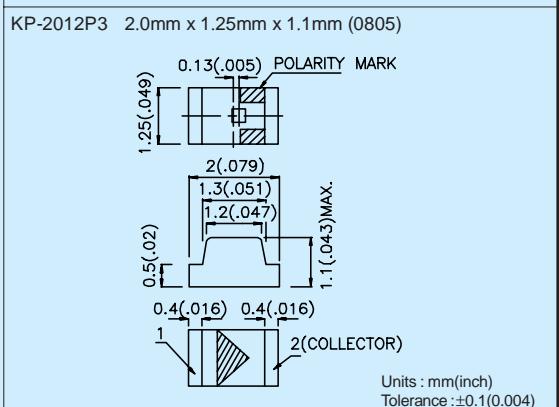
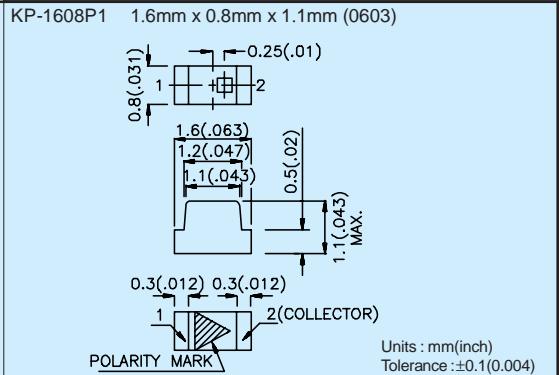
KPA-3010P3BT BLUE TRANSPARENT LENS

ABSOLUTE MAXIMUM RATING T_A=25°C

Parameter	Max. Ratings
Collector-to-Emitter Breakdown Voltage	30V
Emitter-to-Collector Breakdown Voltage	5V
Power Dissipation at (or below) 25°C Free Air Temperature	100mW
Operating Temperature Range	-40°C ~ +85°C
Storage Temperature Range	-40°C ~ +85°C

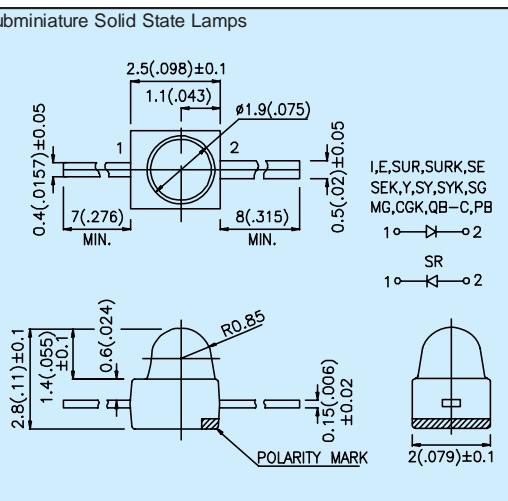
ELECTRICAL AND RADIANT CHARACTERISTICS T_A=25°C

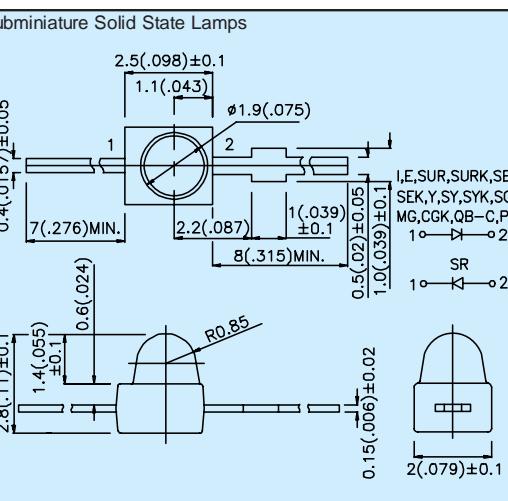
Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Condition
V _B R CEO	Collector-to-Emitter Breakdown Voltage	30	-	-	V	I _C =100µA E _e =0mW/cm ²
V _B R ECO	Emitter-to-Collector Breakdown Voltage	5	-	-	V	I _E =100µA E _e =0mW/cm ²
V _{CE} (SAT)	Collector-to-Emitter Saturation Voltage	-	-	0.8	V	I _C =2mA E _e =20mW/cm ²
I _{CEO}	Collector Dark Current	-	-	100	nA	V _{CE} =10V E _e =0mW/cm ²
T _R	Rise Time (10% to 90%)	-	3	-	µs	V _{CE} =5V I _C =1mA R _L =1KΩ
T _F	Fall Time (90% to 10%)	-	3	-	µs	
I _(ON)	On State Collector Current	0.1	0.3	-	mA	V _{CE} =5V, E _e =1mW/cm ² , λ=940nm

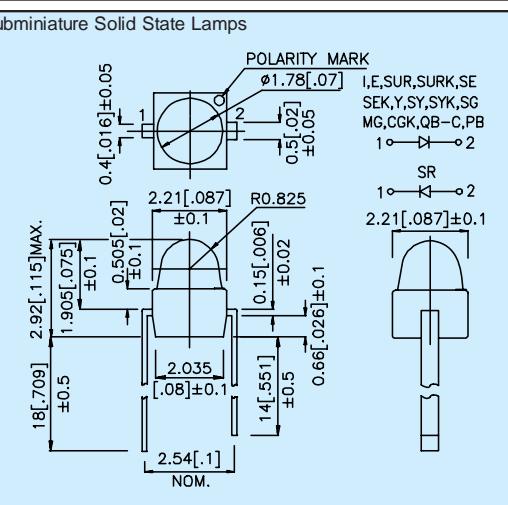




Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 201/2	Dimension
				Min.	Typ.		

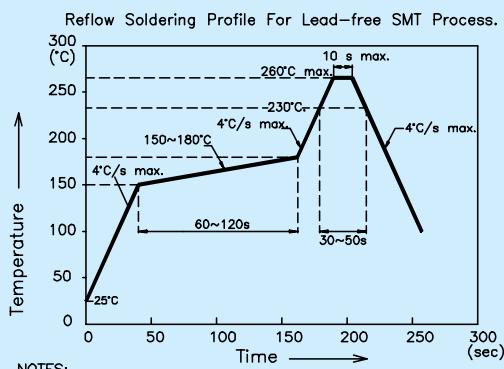
KM2520ID01	GaAsP/GaP	625	red diffused	7	30	40°	Subminiature Solid State Lamps 
KM2520EC01	GaAsP/GaP	625	water clear	10	70	20°	
KM2520SRD01	GaAlAs	640	red diffused	50	150	40°	
KM2520SRC01	GaAlAs	640	water clear	110	600	20°	
KM2520SURC01	InGaAIP	628	water clear	280	1000	20°	
KM2520SURCK01	InGaAIP	635	water clear	180	650	20°	
KM2520SEC01	InGaAIP	601	water clear	480	1300	20°	
KM2520SECK01	InGaAIP	601	water clear	180	700	20°	
KM2520YD01	GaAsP/GaP	588	yellow diffused	2.6	10	40°	
KM2520YC01	GaAsP/GaP	588	water clear	10	30	20°	
KM2520SYC01	InGaAIP	588	water clear	110	700	20°	
KM2520SYCK01	InGaAIP	590	water clear	70	300	20°	
KM2520SGD01	GaP	568	green diffused	2.6	10	40°	
KM2520SGC01	GaP	568	water clear	36	80	20°	
KM2520MGC01	InGaAIP	568	water clear	280	600	20°	
KM2520CGCK01	InGaAIP	570	water clear	110	400	20°	
KM2520QBC-C01	GaN	470	water clear	110	400	20°	
KM2520PBC01	InGaN	470	water clear	110	250	20°	

KM2520ID02	GaAsP/GaP	625	red diffused	7	30	40°	Subminiature Solid State Lamps 
KM2520EC02	GaAsP/GaP	625	water clear	10	70	20°	
KM2520SRD02	GaAlAs	640	red diffused	50	150	40°	
KM2520SRC02	GaAlAs	640	water clear	110	600	20°	
KM2520SURC02	InGaAIP	628	water clear	280	1000	20°	
KM2520SURCK02	InGaAIP	635	water clear	180	650	20°	
KM2520SEC02	InGaAIP	601	water clear	480	1300	20°	
KM2520SECK02	InGaAIP	601	water clear	180	700	20°	
KM2520YD02	GaAsP/GaP	588	yellow diffused	2.6	10	40°	
KM2520YC02	GaAsP/GaP	588	water clear	10	30	20°	
KM2520SYC02	InGaAIP	588	water clear	110	700	20°	
KM2520SYCK02	InGaAIP	590	water clear	70	300	20°	
KM2520SGD02	GaP	568	green diffused	2.6	10	40°	
KM2520SGC02	GaP	568	water clear	36	80	20°	
KM2520MGC02	InGaAIP	568	water clear	280	600	20°	
KM2520CGCK02	InGaAIP	570	water clear	110	400	20°	
KM2520QBC-C02	GaN	470	water clear	110	400	20°	
KM2520PBC02	InGaN	470	water clear	110	250	20°	

KM-27ID-10	GaAsP/GaP	625	red diffused	7	30	40°	Subminiature Solid State Lamps 
KM-27EC-10	GaAsP/GaP	625	water clear	10	70	20°	
KM-27SRD-10	GaAlAs	640	red diffused	50	150	40°	
KM-27SRC-10	GaAlAs	640	water clear	110	600	20°	
KM-27SURC-10	InGaAIP	628	water clear	280	1000	20°	
KM-27SURCK-10	InGaAIP	635	water clear	180	650	20°	
KM-27SEC-10	InGaAIP	601	water clear	480	1300	20°	
KM-27SECK-10	InGaAIP	601	water clear	180	700	20°	
KM-27YD-10	GaAsP/GaP	588	yellow diffused	2.6	10	40°	
KM-27YC-10	GaAsP/GaP	588	water clear	10	30	20°	
KM-27SYC-10	InGaAIP	588	water clear	110	700	20°	
KM-27SYCK-10	InGaAIP	590	water clear	70	300	20°	
KM-27SGD-10	GaP	568	green diffused	2.6	10	40°	
KM-27SGC-10	GaP	568	water clear	36	80	20°	
KM-27MGC-10	InGaAIP	568	water clear	280	600	20°	
KM-27CGCK-10	InGaAIP	570	water clear	110	400	20°	
KM-27QBC-C-10	GaN	470	water clear	110	400	20°	
KM-27PBC-10	InGaN	470	water clear	110	250	20°	

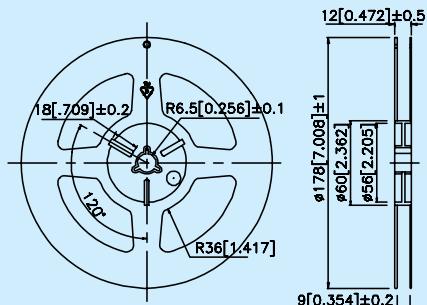
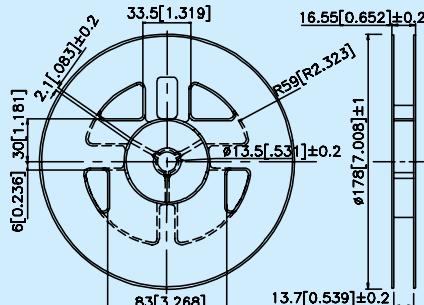
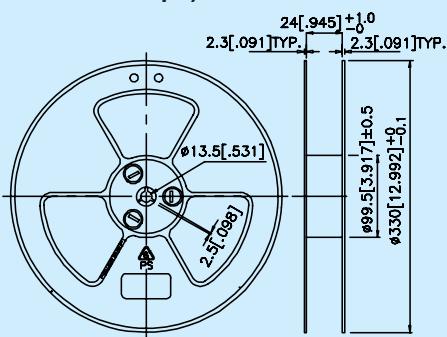
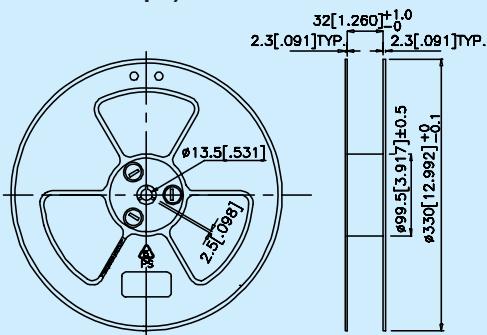
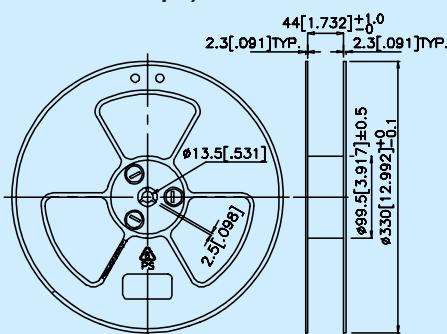
NOTES:

- All dimensions are in millimeters(inches).
- Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.

SMT Reflow Soldering Instructions

- NOTES:
- We recommend the reflow temperature 245°C($\pm 5^\circ\text{C}$). The maximum soldering temperature should be limited to 260°C.
 - Don't cause stress to the epoxy resin while it is exposed to high temperature.
 - Number of reflow process shall be 2 times or less.

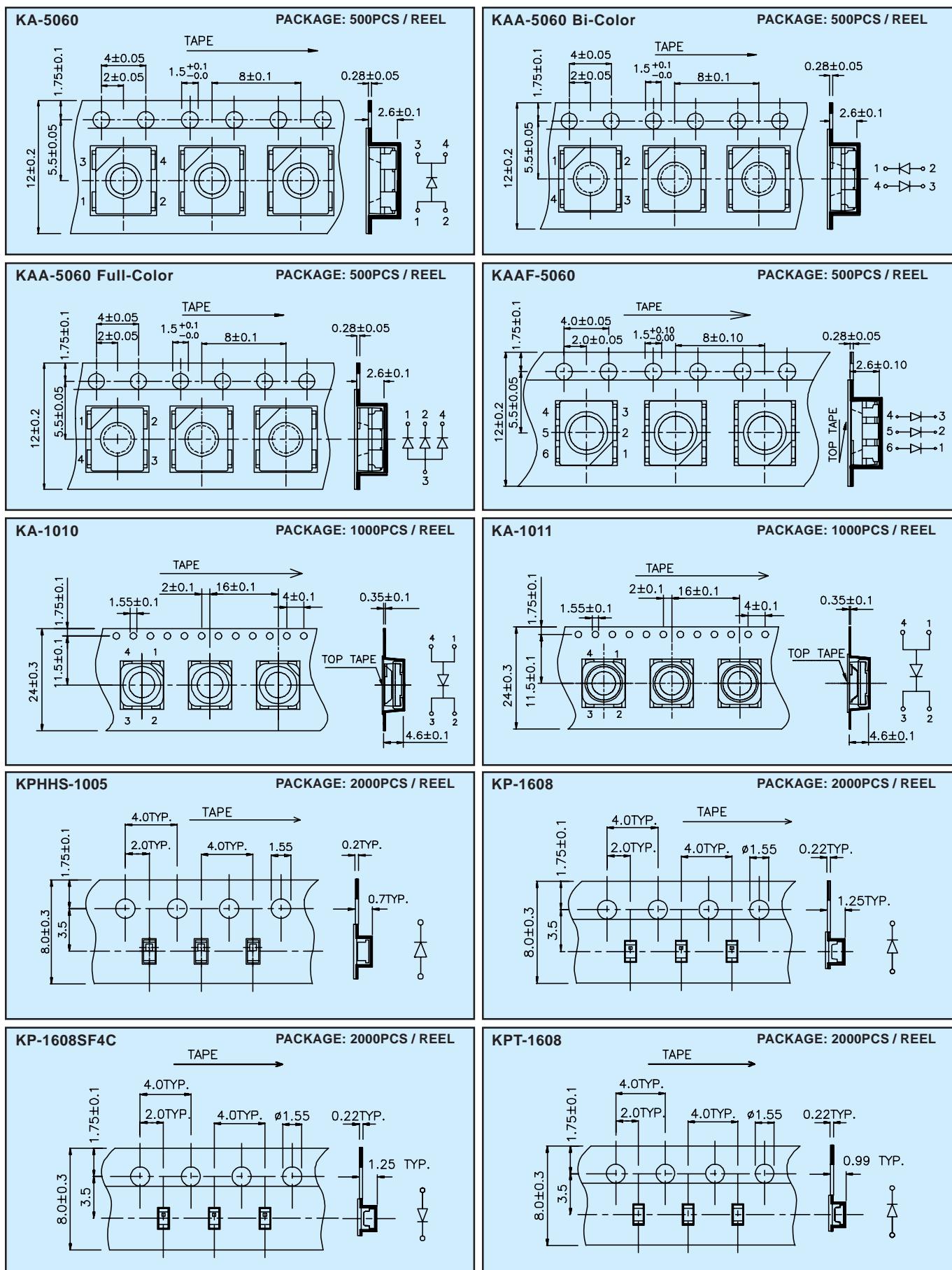
PART NO.	REEL DIMENSION
KA-3020,KM-23-F,KP-1608,KP-2012,KP-23-F,KP-3216, KPA-2106,KPA-3010,KPA-3210,KPB-3025,KPBA-3010, KPBA-3210,KPBD-3224,KPBL-3025,KPC-3216,KPD-3224, KPEFA-3010,KPEKA-3224,KPFA-3210,KPHF-1612, KPHK-1608,KPHHS-1005,KPJA-2107, KPK-3020,KPK-3216,KPKA-2810,KPKF-3030,KPKB-3025, KPL-3015,KPT-1608,KPT-2012,KPT-3216,KPTB-1612, KPTB-1615,KPTC-2012,KPTK-2012,KPTD-3216, KPTF-3216,KPTR-3216.	7"(for 8mm width tape)
KPDX04,KPPDX04,KPPSX04,KPSX56.	13"(for 32mm width tape)
KA-2734,KA-3022-4.5SF,KA-3528,KA-4040,KA-5060, KAA-3528,KAA-5060,KAAF-5060,KM2520xxx03, KM2520xxx08,KM2520xxx09,KM-27xxx-03,KM-27xxx-08, KM-27xxx-09,KPD-2520-03,KPED-3528,KPED-3820, KPEFA-3029,KPEKA-4030,KPF-3236,KPJKA-4008, KPK-3520,KPKA-4110,KPTKA-5614.	7"(for 12mm width tape)
KA-1010,KA-1011,KM-38AJXP/1,KPDX02,KPDX03, KPSX02,KPSX03,KPSX04,L-138A8QMP/1xD/TG, L-1387QMP/1,L-93A8EW/1xD/TG-01.	13"(for 24mm width tape)
KPDX56.	13"(for 44mm width tape)

7"(for 8mm width tape)**7"(for 12mm width tape)****13"(for 24mm width tape)****13"(for 32mm width tape)****13"(for 44mm width tape)****NOTES:**

- All dimensions are in millimeters(inches).
- Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.

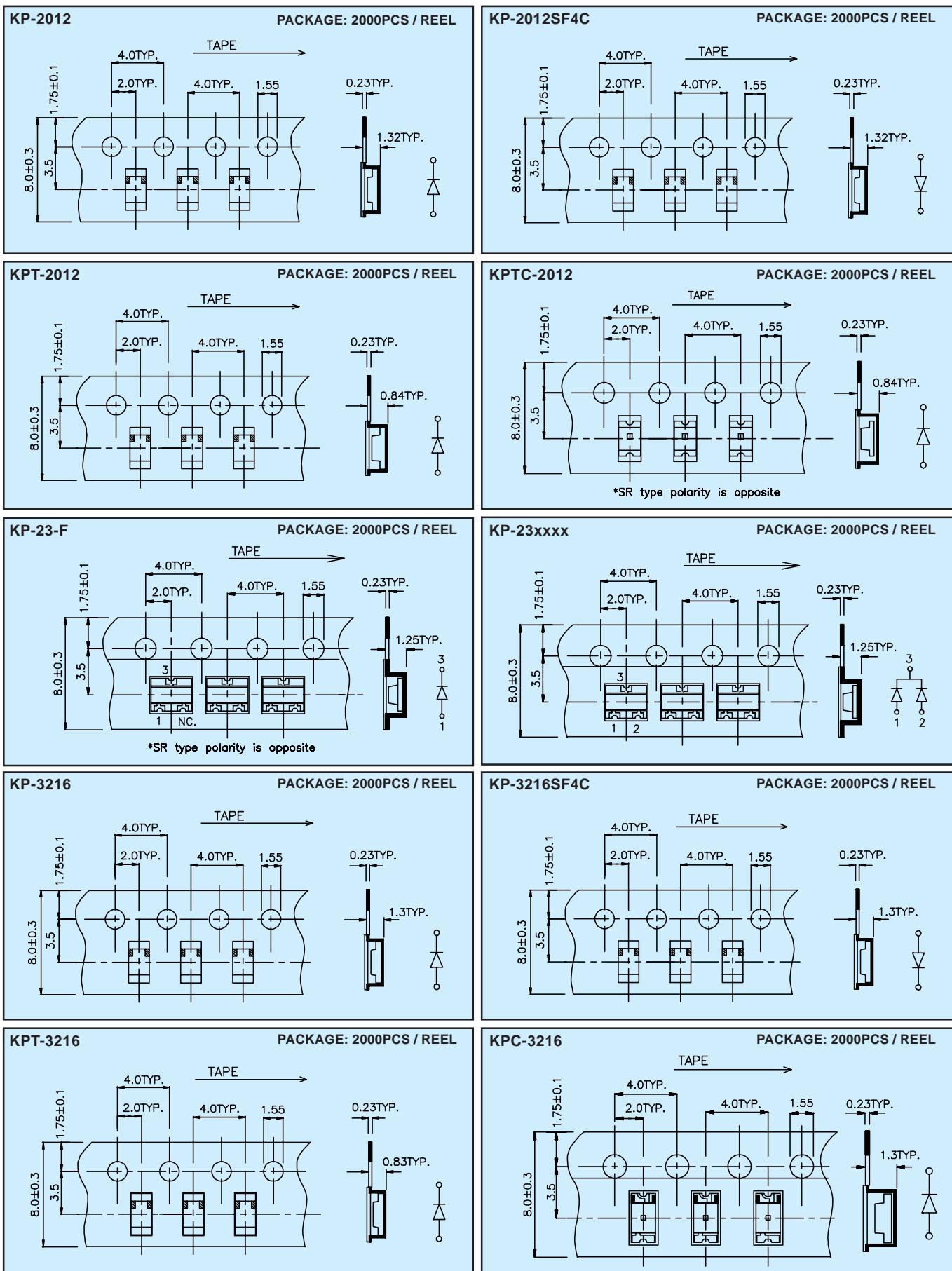
SMD TAPE SPECIFICATIONS

Kingbright



NOTES:

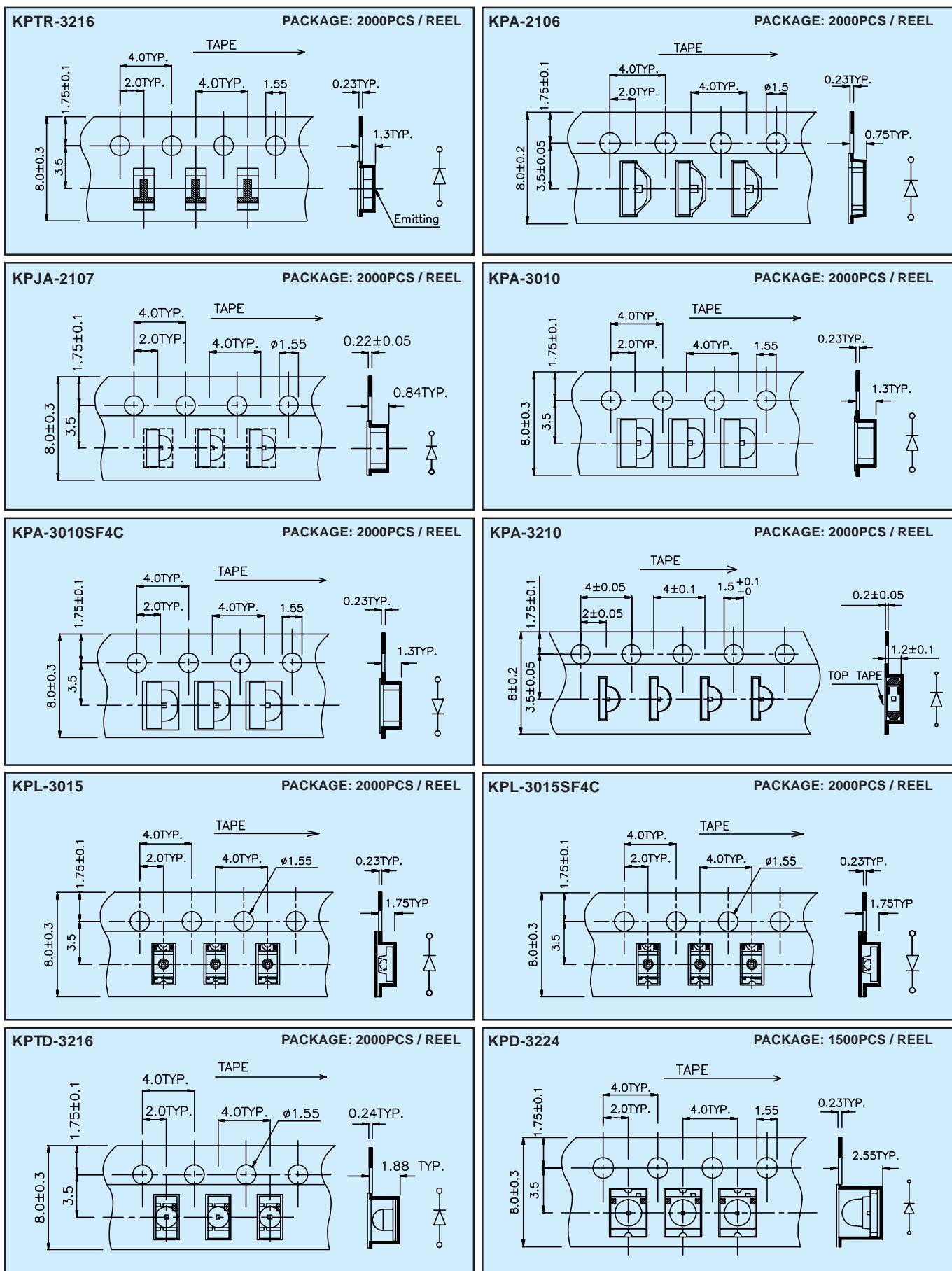
1. All dimensions are in millimeters(inches).
2. Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.

**NOTES:**

1. All dimensions are in millimeters(inches).
2. Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.

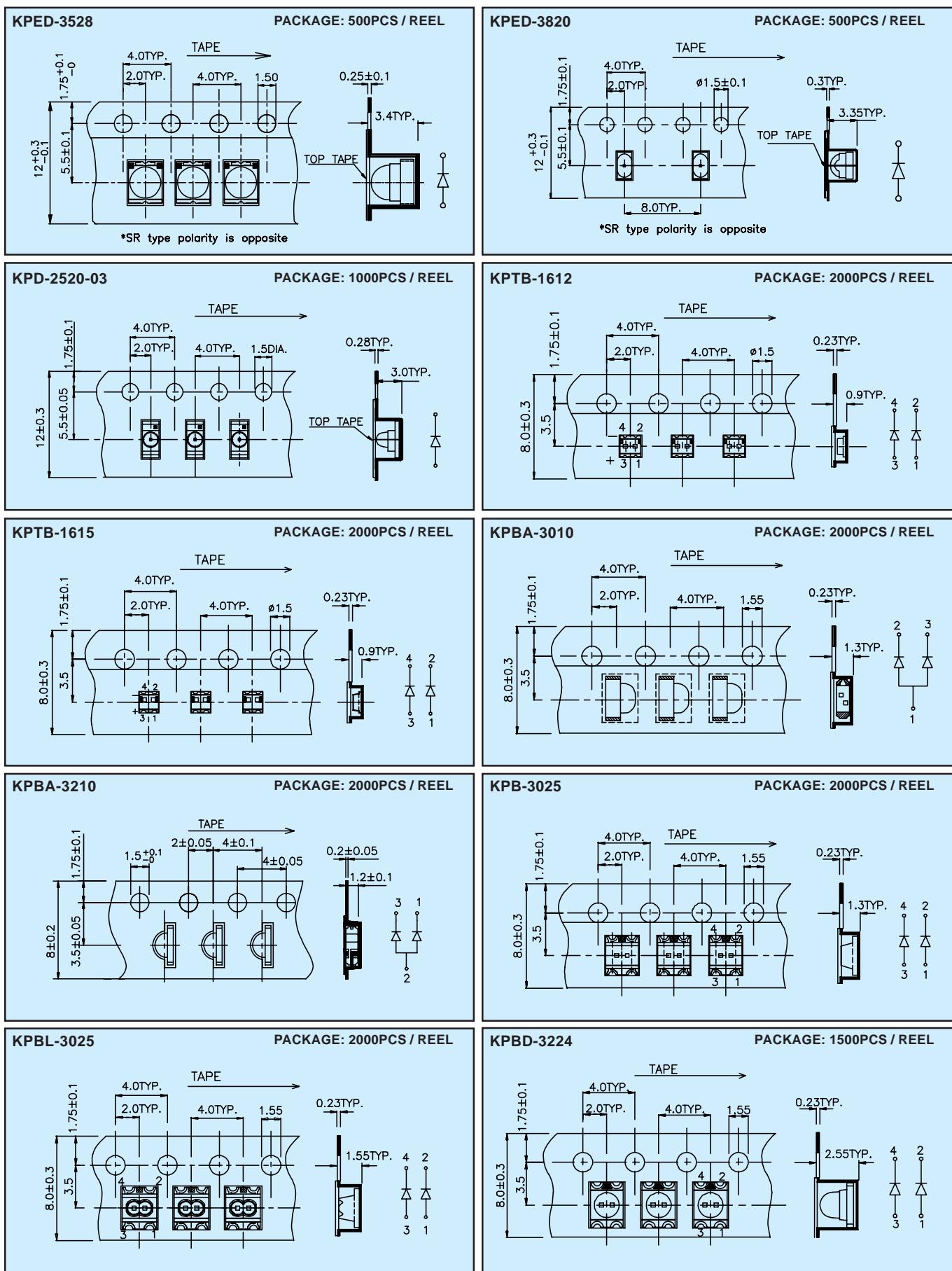
SMD TAPE SPECIFICATIONS

Kingbright



NOTES:

1. All dimensions are in millimeters(inches).
2. Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.

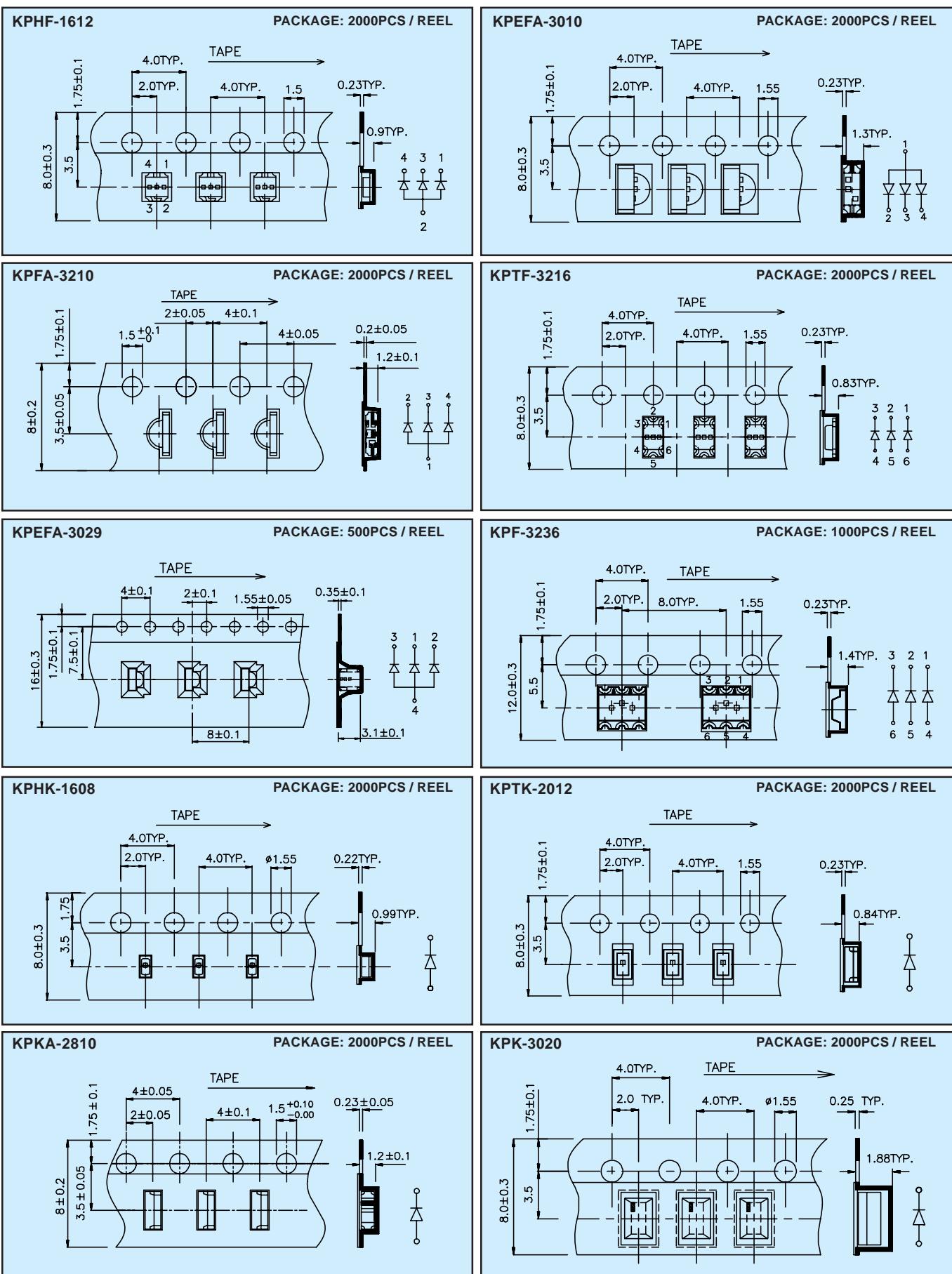


NOTES:

1. All dimensions are in millimeters(inches).
2. Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.

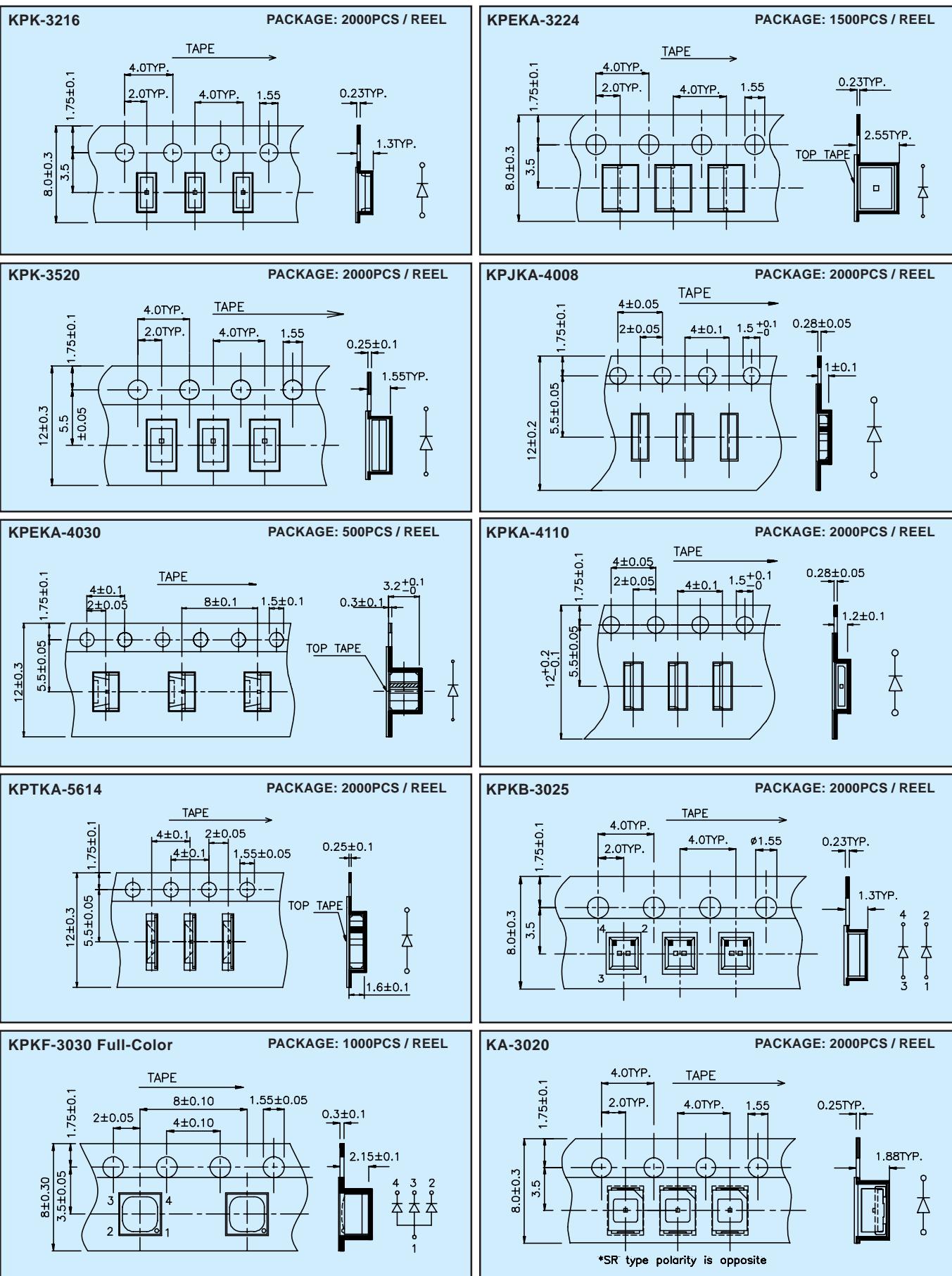
SMD TAPE SPECIFICATIONS

Kingbright



NOTES:

1. All dimensions are in millimeters(inches).
2. Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.

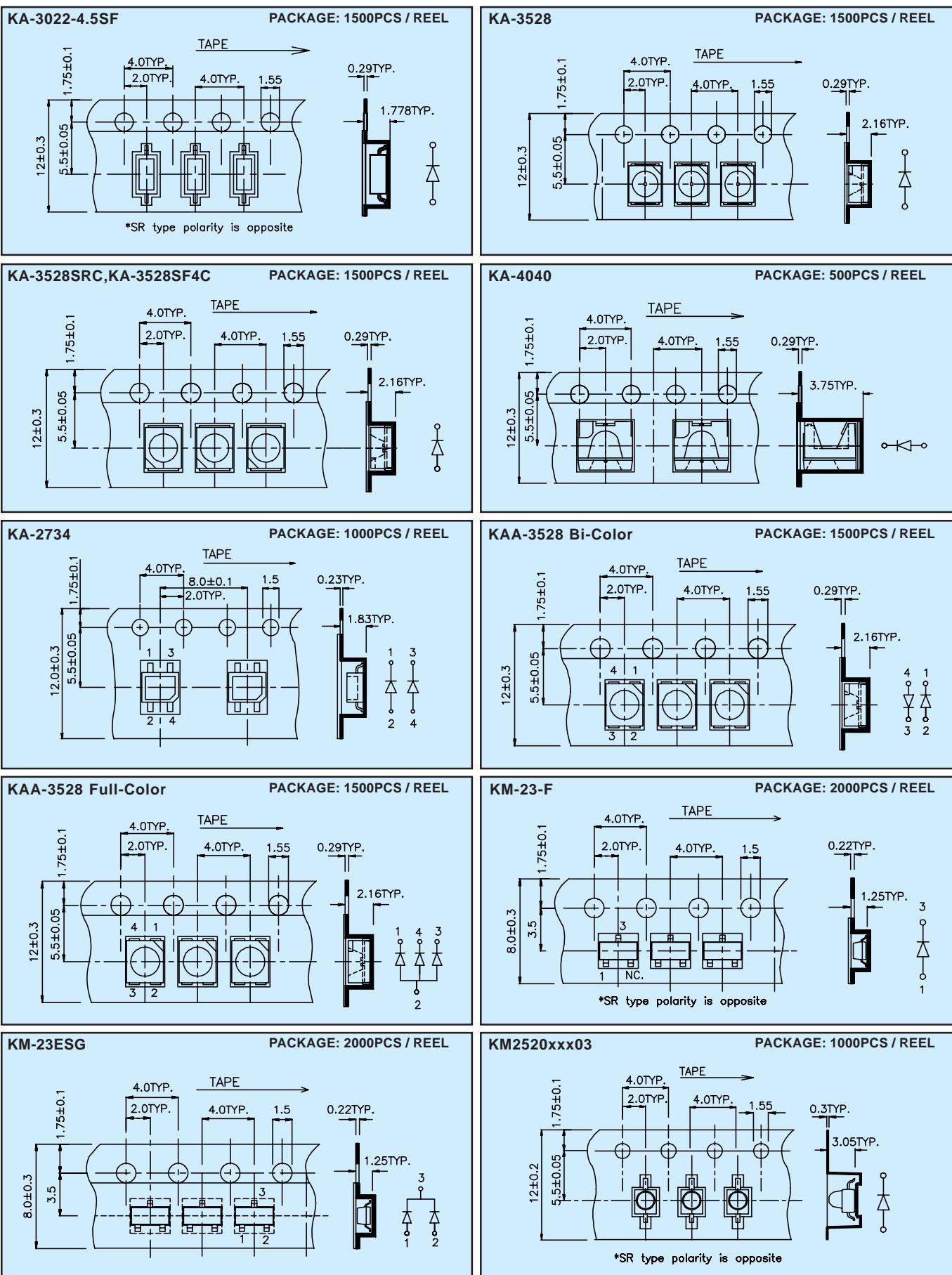
**NOTES:**

1. All dimensions are in millimeters(inches).
2. Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.

*SR type polarity is opposite

SMD TAPE SPECIFICATIONS

Kingbright

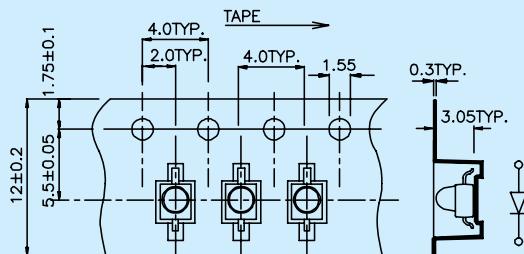


NOTES:

1. All dimensions are in millimeters(inches).
2. Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.

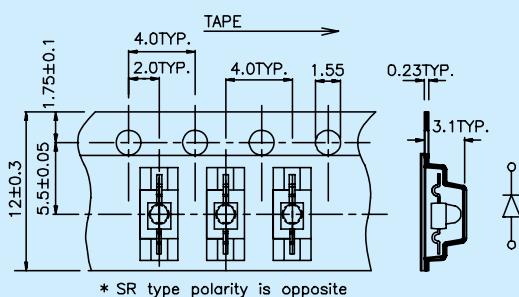
KM2520SF4C03

PACKAGE: 1000PCS / REEL



PACKAGE: 1000PCS / REEL

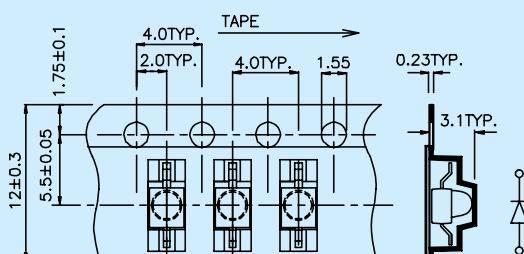
KM2520xxx08



PACKAGE: 1000PCS / REEL

KM2520xxx09

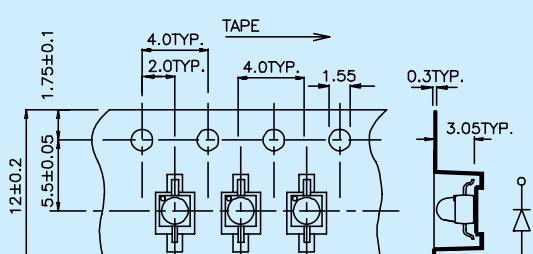
PACKAGE: 1000PCS / REEL



PACKAGE: 1000PCS / REEL

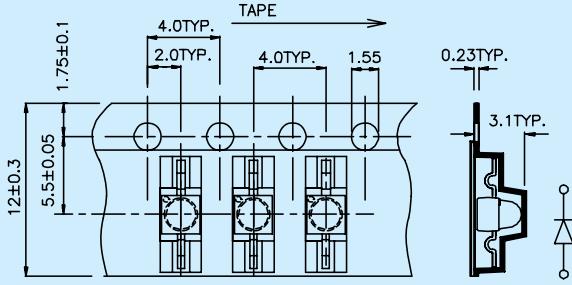
KM-27xxx-03

PACKAGE: 1000PCS / REEL



KM-27xxx-08

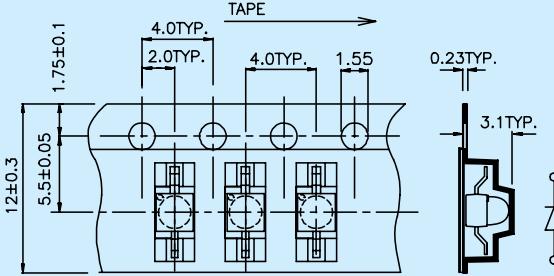
PACKAGE: 1000PCS / REEL



PACKAGE: 1000PCS / REEL

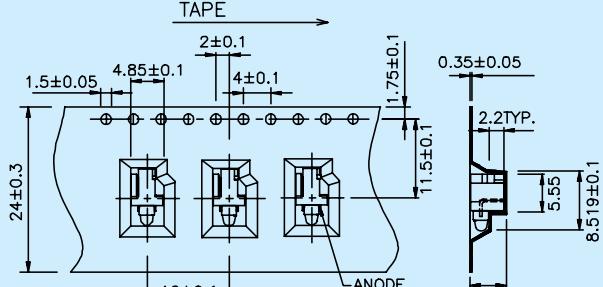
KM-27xxx-09

PACKAGE: 1000PCS / REEL



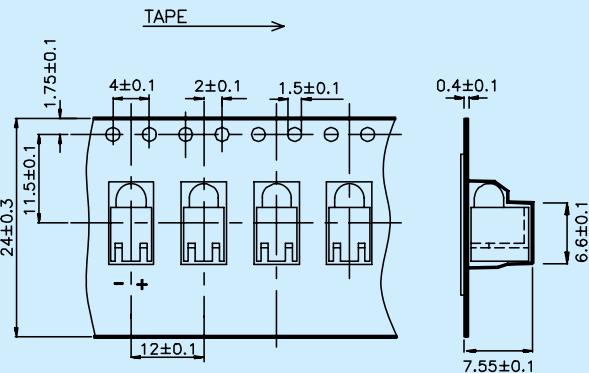
KM-38AJXP/1

PACKAGE: 500PCS / REEL



PACKAGE: 1000PCS / REEL

L-93A8EWP/1xD/TG-0L



NOTES:

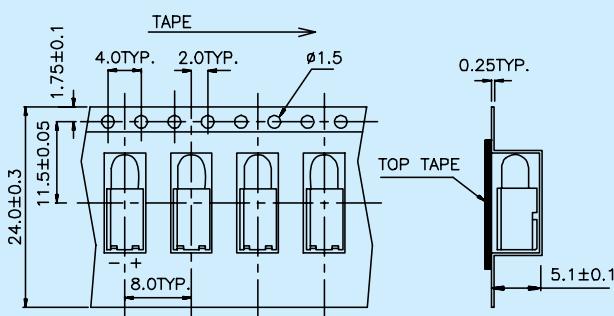
- All dimensions are in millimeters(inches).
- Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.

SMD & SMD DISPLAY TAPE SPECIFICATIONS

Kingbright

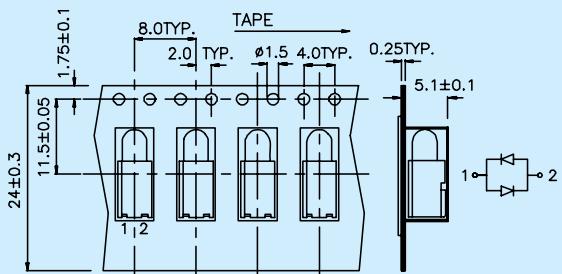
L-138A8QMP/1xD/TG

PACKAGE: 1000PCS / REEL



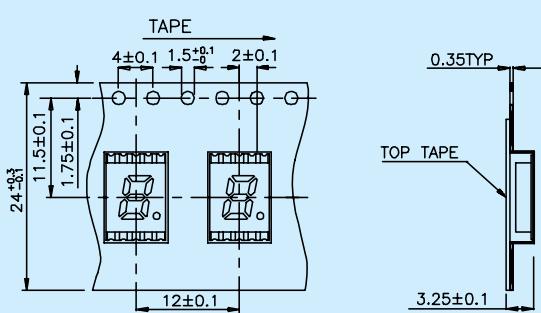
L-1387QMP/1

PACKAGE: 1000PCS / REEL



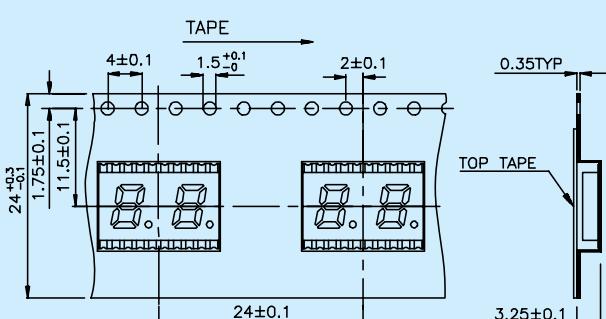
KPSX02

PACKAGE: 1300PCS / REEL



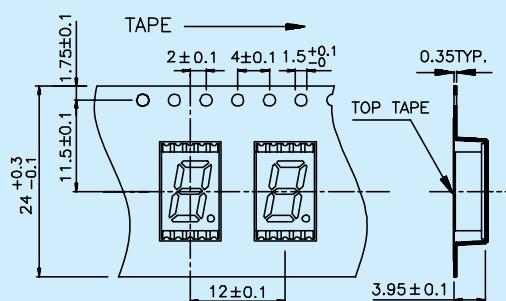
KPDX02

PACKAGE: 600PCS / REEL



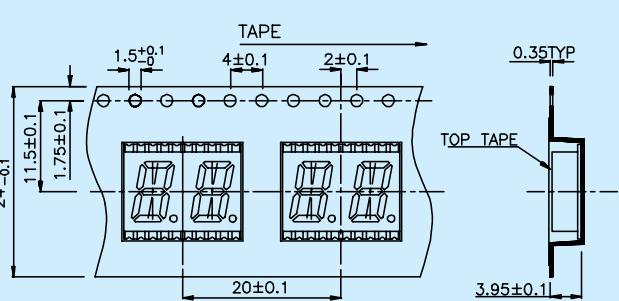
KPSX03

PACKAGE: 1100PCS / REEL



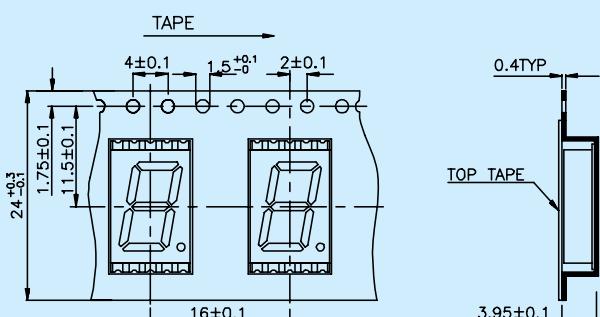
KPDX03

PACKAGE: 600PCS / REEL



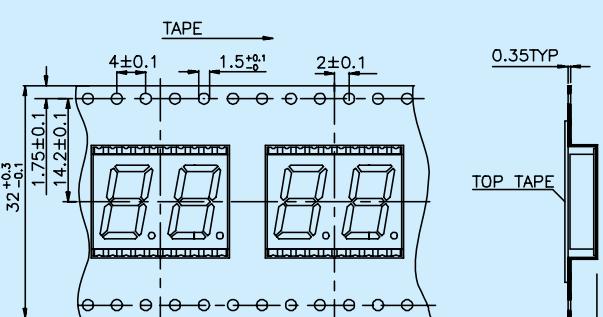
KPSX04

PACKAGE: 800PCS / REEL



KPDX04

PACKAGE: 500PCS / REEL

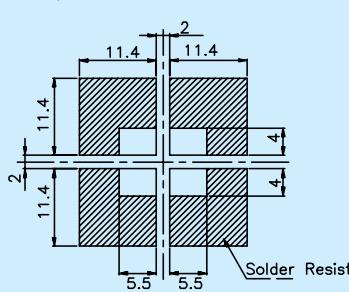
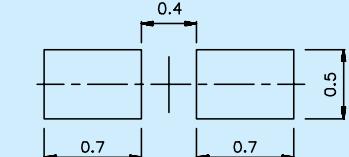
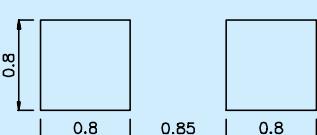
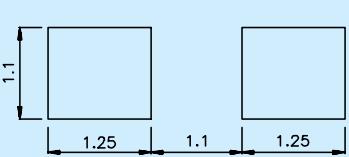
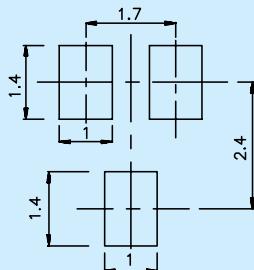
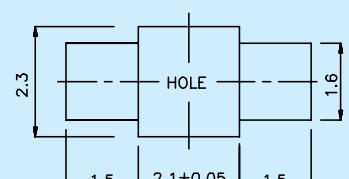
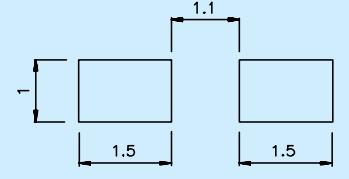
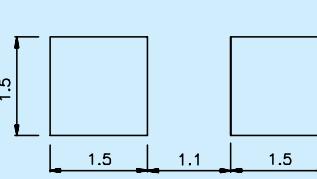
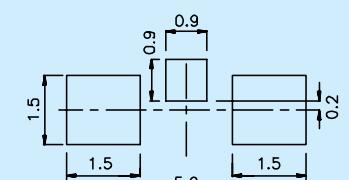
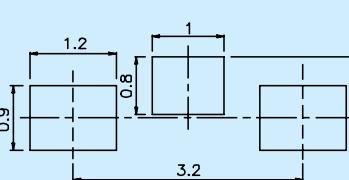
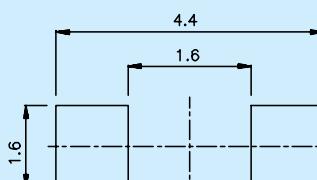
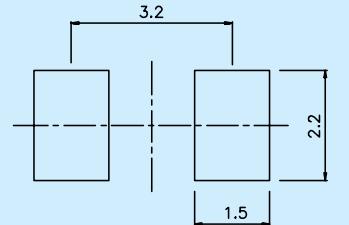
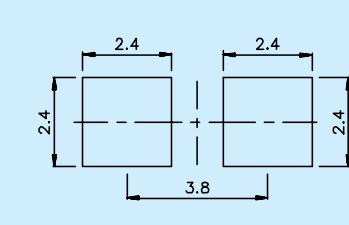
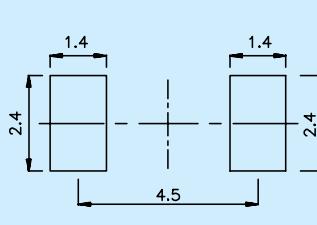


NOTES:

1. All dimensions are in millimeters(inches).
2. Tolerance is ±0.25mm(0.01") unless otherwise noted.

RECOMMENDED SOLDERING PATTERN

Kingbright

KA-1010, KA-1011	KPHHS-1005	KP-1608, KPT-1608
		
KP-2012, KPT-2012, KPTK-2012 KPTC-2012	KP-23	KP-3216, KPT-3216, KPC-3216, KPTD-3216, KPK-3216
		
KPTR-3216	KPA-2106	KPJA-2107
		
KPA-3010, KPBA-3010	KPA-3210, KPBA-3210	KPL-3015
		
KPD-3224	KPED-3820	KPD-2520-03
		

NOTES:

1. All dimensions are in millimeters(inches).
2. Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.

KPTB-1612	KPTB-1615	KPB-3025, KPBL-3025, KPKB-3025
KPBD-3224	KPHF-1612	KPEFA-3010, KPFA-3210
KPTF-3216	KPEFA-3029	KPF-3236
KPHK-1608	KPKA-2810	KPK-3020
KPEKA-3224	KPK-3520	KPJKA-4008

NOTES:

- All dimensions are in millimeters(inches).
- Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.

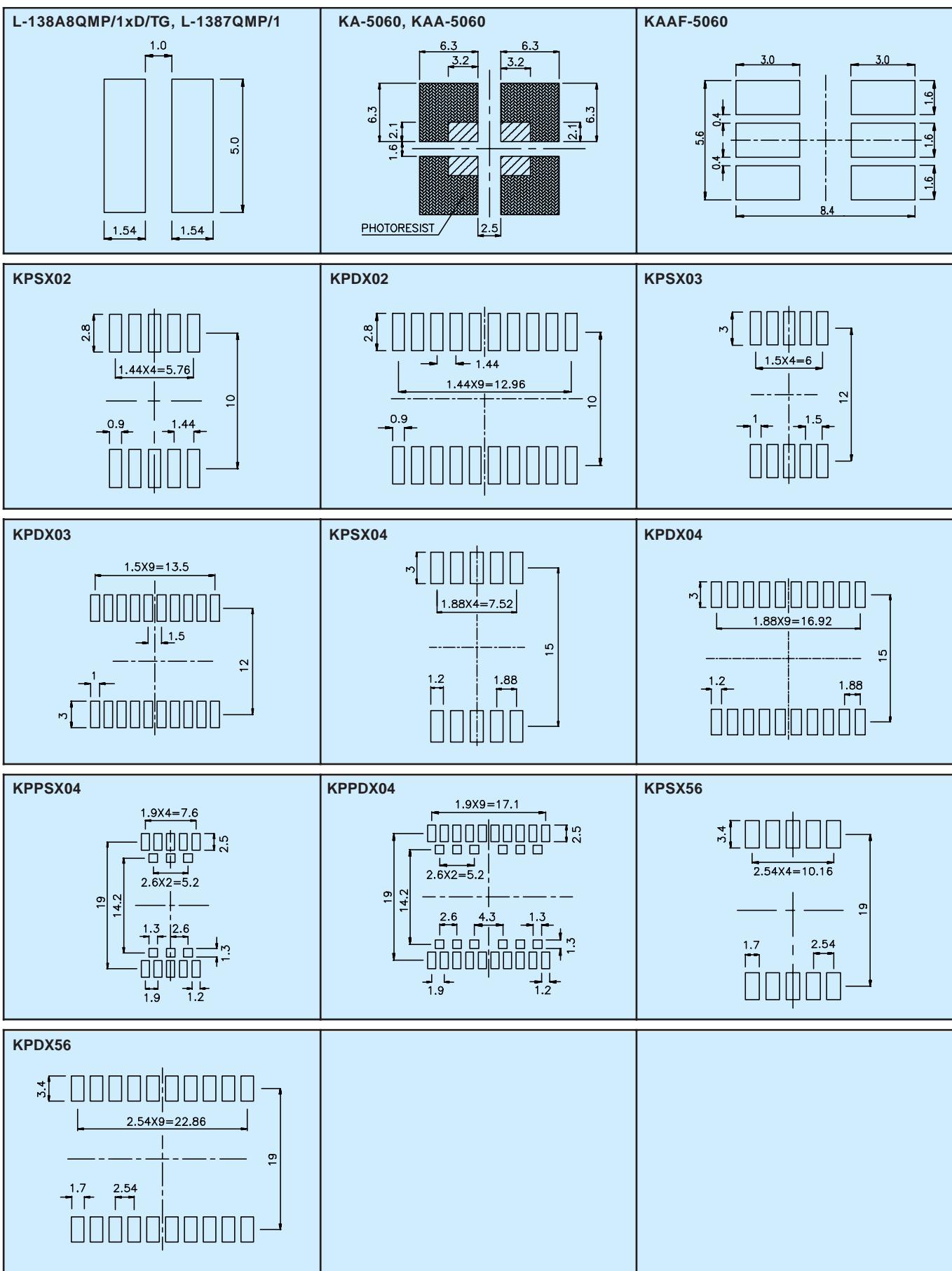
RECOMMENDED SOLDERING PATTERN

Kingbright

KPEKA-4030	KPKA-4110	KPKF-3030
KA-3020	KA-3022-4.5SF	KA-3528,KPED-3528
KA-4040	KA-2734	KAA-3528
KM-23-F	KM2520xxx03,KM-27xxx-03	KM2520xxx08,KM-27xxx-08
KM2520xxx09,KM-27xxx-09	KM-38AJXP/1	L-93A8EWP/1xD/TG-0L

NOTES:

1. All dimensions are in millimeters(inches).
2. Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.



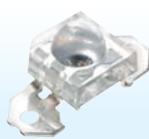
NOTES:

- All dimensions are in millimeters(inches).
- Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.

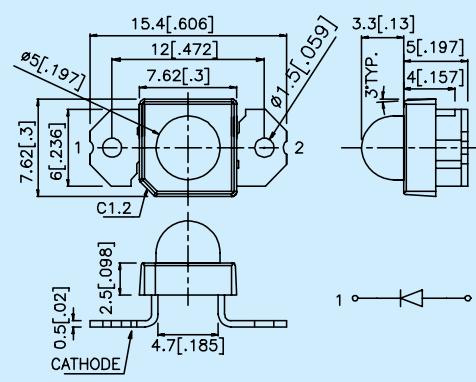
L-7700C4

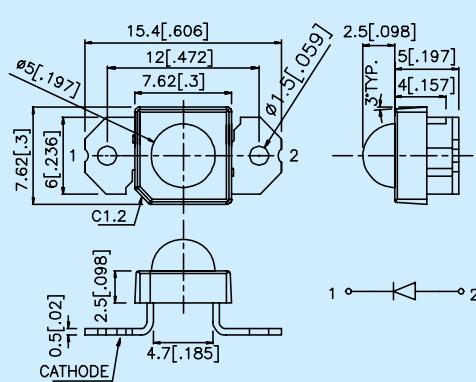


L-7701C4



Part No.	Material	λ D (nm)	Lens Type	Iv (mcd) @50mA *70mA		Viewing Angle 201/2	Dimension
				Min.	Typ.		

L-7700C4SEC-H	InGaAlP	630	water clear	*25000	*30000	30°	7.62mm x 7.62mm 
L-7700C4SYC-H	InGaAlP	589	water clear	*5700	*6400	30°	
L-7700C4SURC-G	InGaAlP	630	water clear	*4700	*7000	30°	
L-7700C4PBC-H	InGaN	470	water clear	3800	5700	30°	
L-7700C4VGC-H	InGaN	525	water clear	16000	21000	30°	

L-7701C4SEC-H	InGaAlP	630	water clear	*10000	*12000	50°	7.62mm x 7.62mm 
L-7701C4SYC-H	InGaAlP	589	water clear	*3300	*3700	50°	
L-7701C4SURC-G	InGaAlP	630	water clear	*2800	*4100	50°	
L-7701C4PBC-H	InGaN	470	water clear	2200	3200	50°	
L-7701C4VGC-H	InGaN	525	water clear	7500	9400	50°	

NOTES:

1. All dimensions are in millimeters(inches).
2. Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.