



BRIGHTTEK
BRIGHTTEK (EUROPE) LIMITED

BRIGHTTEK

2016 Catalogue

- **SMD: Lead Frame**

Lead Frame

Lead Frame

- 2421	3
- 2520	8
- 3022	10
- 3228	11

Lead Frame

2421 Type A



Features:

- Top View
- Low Power LED
- Small Viewing Angle
- Various Colour
- Subminiature LED
- High Efficiency
- High Intensity Output
- Reel Packing

Applications:

- Indication Light
- Traffic Signal
- Information Board
- Decoration Lighting
- Signal and Switch

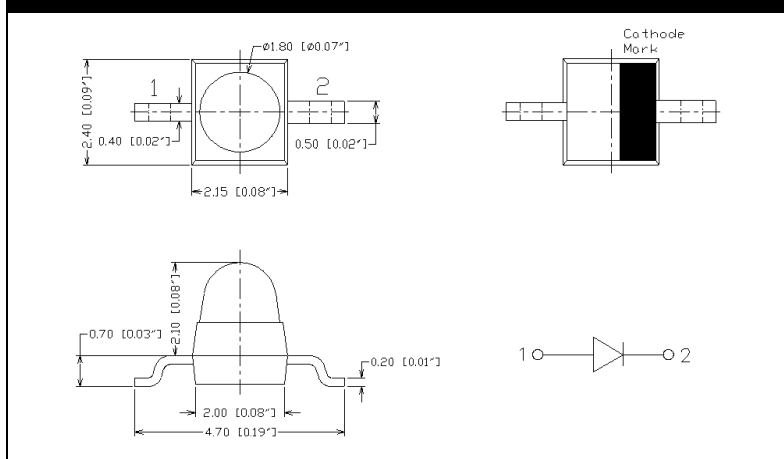
White Electrical & Optical Characteristics (typ. at 20mA)

Order Code	Colour	CCT (K)	$2\theta_{1/2}$ (°)	I_V (mcd)	V_F (V)	I_F (mA)	I_{MAX} (mA)
N0W12S29	Sky White	5600-46500K	165	380	3.2	20	30

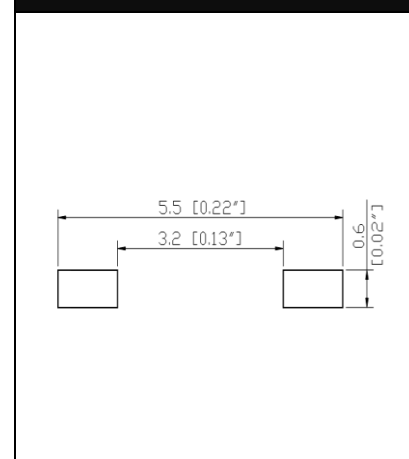
Colour Electrical & Optical Characteristics (typ. at 20mA)

Order Code	Colour	WL (nm)	$2\theta_{1/2}$ (°)	I_V (mcd)	V_F (V)	I_F (mA)	I_{MAX} (mA)
NOR12S28	Red ■	625-635nm	20	2000	2.0	20	30
NOR12S27	Red ■	615-630nm	20	2400	2.0	20	30
NOY12S30	Yellow ■	585-595nm	20	2600	2.0	20	30
NOG12S25	Green ■	565-576nm	20	520	2.0	20	30
NOG12S26	Green ■	520-530nm	20	10000	3.2	20	30
NOB12S24	Blue ■	460-470nm	20	1300	3.1	20	30

Package Dimensions (mm)



Recommended Solder Pattern



Lead Frame

2421 Type B



Features:

- Top View
- Low Power LED
- Small Viewing Angle
- Various Colour
- Subminiature LED
- High Efficiency
- High Intensity Output
- Reel Packing

Applications:

- Indication Light
- Traffic Signal
- Information Board
- Decoration Lighting
- Signal and Switch

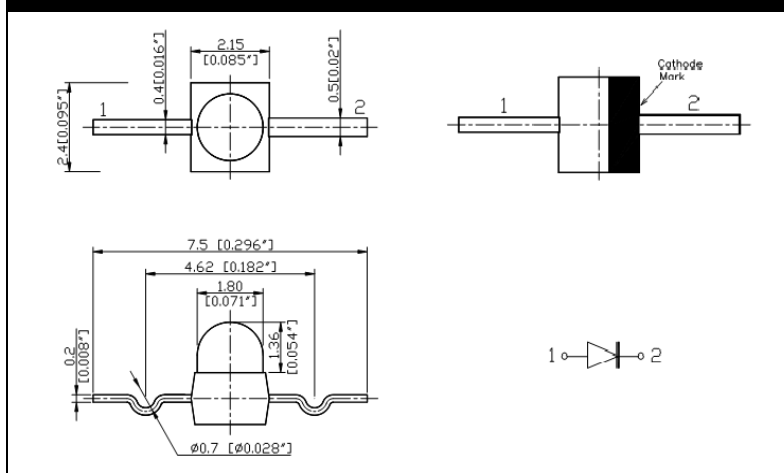
White Electrical & Optical Characteristics (typ. at 20mA)

Order Code	Colour	CCT (K)	$2\theta_{1/2}$ (°)	I_V (mcd)	V_F (V)	I_F (mA)	I_{MAX} (mA)
NOW12S21	Sky White	5600-46500K	165	115	3.2	20	30

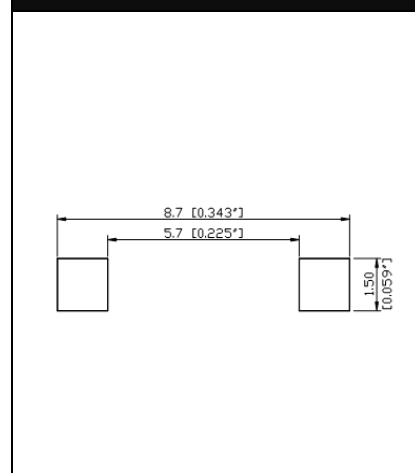
Colour Electrical & Optical Characteristics (typ. at 20mA)

Order Code	Colour	WL (nm)	$2\theta_{1/2}$ (°)	I_V (mcd)	V_F (V)	I_F (mA)	I_{MAX} (mA)
NOR12S20	Red ■	625-635nm	20	2000	2.0	20	30
NOR12S19	Red ■	615-630nm	20	2400	2.0	20	30
NOY12S22	Yellow ■	585-595nm	20	2875	2.0	20	30
NOG12S18	Green ■	565-576nm	20	520	2.0	20	30
NOB12S17	Blue ■	460-470nm	20	1300	3.1	20	30

Package Dimensions (mm)



Recommended Solder Pattern



Lead Frame

2421 Flat Type A



Features:

- Top View
- Low Power LED
- Various Colour
- Subminiature LED
- High Efficiency
- High Intensity Output
- Reel Packing

Applications:

- Indication Light
- Traffic Signal
- Information Board
- Decoration Lighting
- Signal and Switch

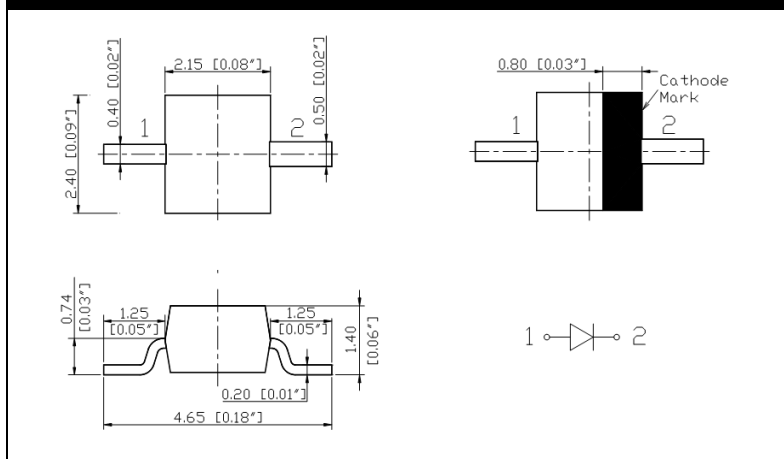
White Electrical & Optical Characteristics (typ. at 20mA)

Order Code	Colour	CCT (K)	$2\theta_{1/2}$ (°)	I_V (mcd)	V_F (V)	I_F (mA)	I_{MAX} (mA)
NOW12S08	Sky White	5600-46500K	150	250	3.2	20	30

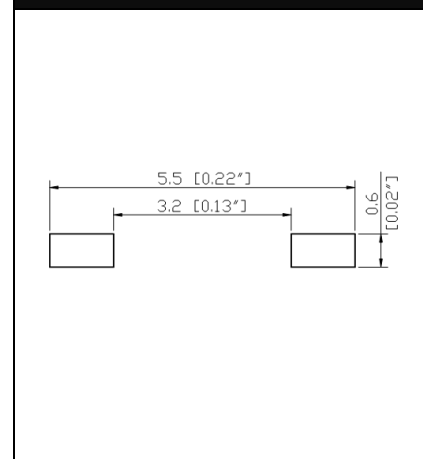
Colour Electrical & Optical Characteristics (typ. at 20mA)

Order Code	Colour	WL (nm)	$2\theta_{1/2}$ (°)	I_V (mcd)	V_F (V)	I_F (mA)	I_{MAX} (mA)
NOR12S07	Red ■	625-635nm	150	95	2.0	20	30
NOY12S09	Yellow ■	585-595nm	150	150	2.0	20	30
NOG12S05	Green ■	565-575nm	150	45	2.0	20	30
NOG12S06	Green ■	520-530nm	150	360	3.2	20	30
NOB12S04	Blue ■	460-470nm	150	50	3.1	20	30

Package Dimensions (mm)



Recommended Solder Pattern



Lead Frame

2421 Flat Type B



Features:

- Top View
- Low Power LED
- Various Colour
- Subminiature LED
- High Efficiency
- High Intensity Output
- Reel Packing

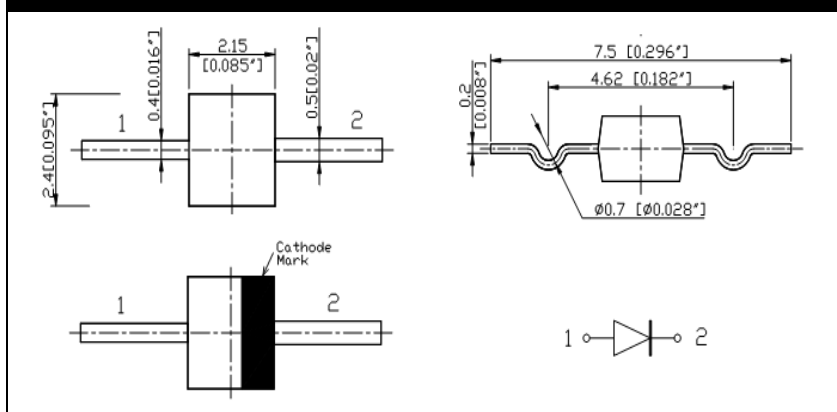
Applications:

- Indication Light
- Traffic Signal
- Information Board
- Decoration Lighting
- Signal and Switch

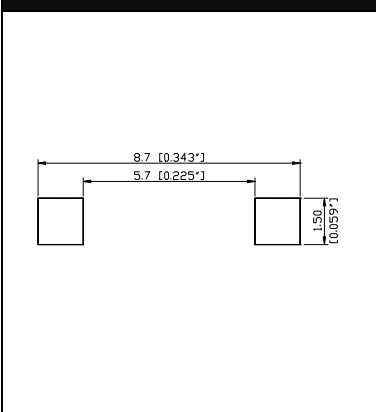
Colour Electrical & Optical Characteristics (typ. at 20mA)

Order Code	Colour	WL (nm)	$2\theta_{1/2}$ (°)	I_V (mcd)	V_F (V)	I_F (mA)	I_{MAX} (mA)
N0R17S95	Red ■	615-630nm	150	120	2.0	20	30

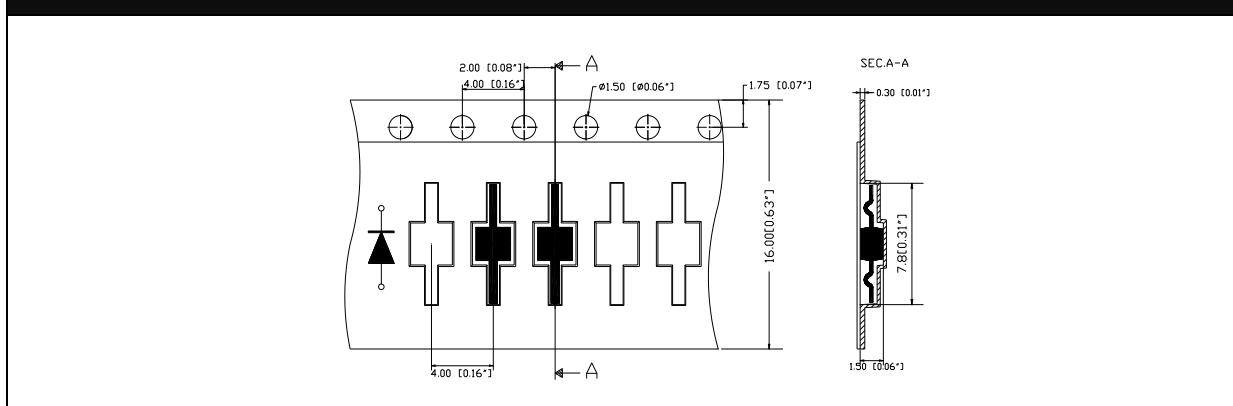
Package Dimensions (mm)



Recommended Solder Pattern



Packing Dimension



Lead Frame

2421 Flat Type C



Features:

- Top View
- Low Power LED
- Various Colour
- Subminiature LED
- High Efficiency
- High Intensity Output
- Reel Packing


Applications:

- Indication Light
- Traffic Signal
- Information Board
- Decoration Lighting
- Signal and Switch

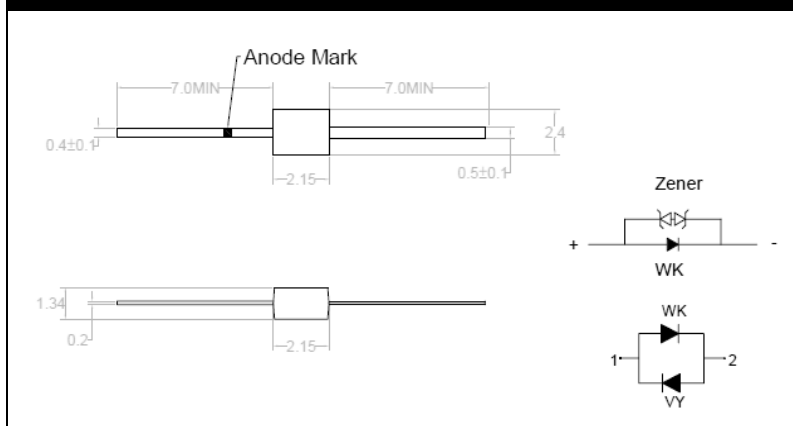
White Electrical & Optical Characteristics (typ. at 20mA)

Order Code	Colour	CCT (K)	$2\theta_{1/2}$ (°)	I_v (mcd)	V_F (V)	I_F (mA)	I_{MAX} (mA)
N0W23S25Z	Sky White	7000-46500K	150	120	3.3	20	30

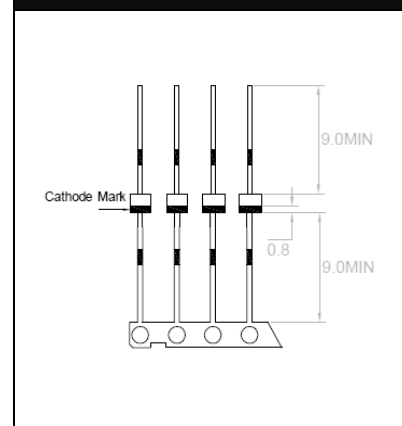
Dual Colours Electrical & Optical Characteristics

Order Code	Colour	CCT (K) / WL (nm)	$2\theta_{1/2}$ (°)	I_v (mcd)	V_F (V)	I_F (mA)
N0D23S24	Cool White/Yellow 	5000K/590nm	150	290/75	3.3/2.1	20/20

Package Dimensions (mm)



Packing Dimension



Lead Frame

2520 Type A



Features:

- Top View
- Low Power LED
- Small Viewing Angle
- Various Colour
- Subminiature LED
- High Efficiency
- High Intensity Output
- Reel Packing

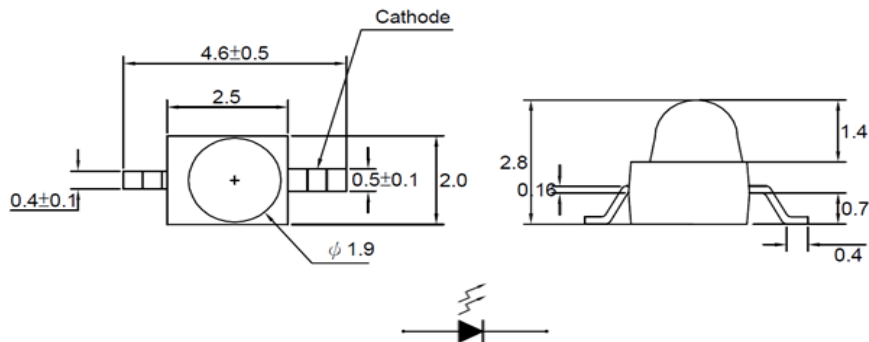
Applications:

- Indication Light
- Traffic Signal
- Information Board
- Decoration Lighting
- Signal and Switch

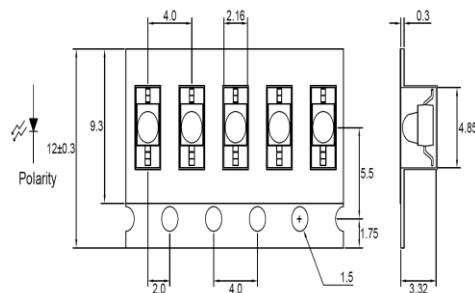
Colour Electrical & Optical Characteristics (typ. at 20mA)

Order Code	Colour	WL (nm)	$2\theta_{1/2}$ (°)	I_V (mcd)	V_F (V)	I_F (mA)	I_{MAX} (mA)
NOR08S23	Red	627-640nm	20	2700	2.2	20	50
NOR08S17	Red	625-640nm	20	300	2.2	20	30
NOR08S18	Red	625-640nm	20	700	2.1	20	50
NOA08S14	Amber	595-610nm	20	1500	2.2	20	30
NOY08S20	Yellow	590-600nm	20	1800	2.2	20	30
NOY08S21	Yellow	590-600nm	20	900	2.2	20	50
NOG08S13	Green	570-580nm	20	450	2.2	20	25
NOG08S22	Green	520-535nm	20	1800	3.7	20	30
NOB08S15	Blue	465-480nm	20	300	3.7	20	30

Package Dimensions (mm)



Packing Dimension



Lead Frame

2520 Type B



Features:

- Top View
- Low Power LED
- Small Viewing Angle
- Various Colour
- Subminiature LED
- High Efficiency
- High Intensity Output
- Reel Packing

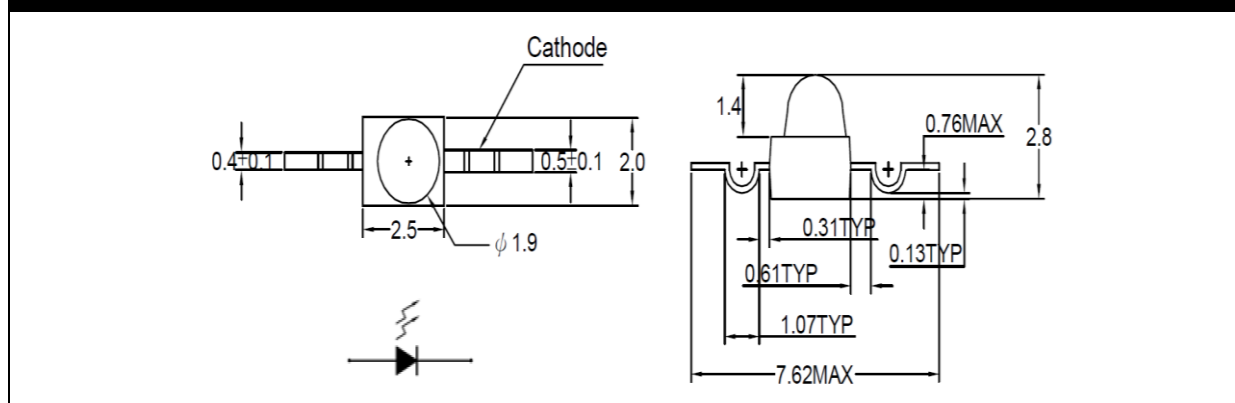
Applications:

- Indication Light
- Traffic Signal
- Information Board
- Decoration Lighting
- Signal and Switch

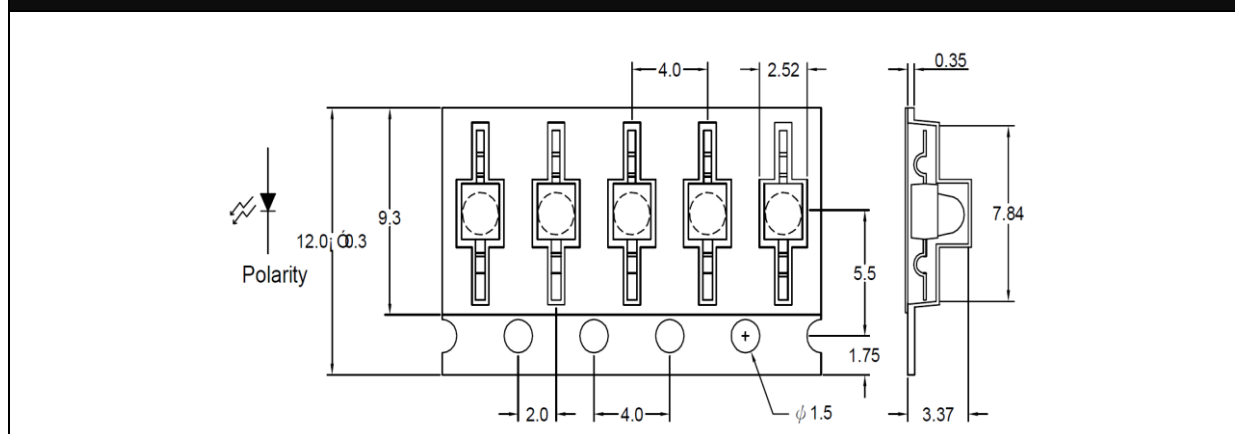
Colour Electrical & Optical Characteristics (typ. at 20mA)

Order Code	Colour	WL (nm)	$2\theta_{1/2}$ (°)	I_V (mcd)	V_F (V)	I_F (mA)	I_{MAX} (mA)
NOR16S68	Red	620-640nm	20	2200	2.0	20	25
NOY23S28	Yellow	590-600nm	20	900	2.1	20	50
NOG23S26	Green	570-580nm	20	450	2.1	20	25
NOB23S27	Blue	460-480nm	20	300	3.5	20	30

Package Dimensions (mm)



Packing Dimension



Lead Frame

3022



Features:

- Top View
- Low Power LED
- Various Colour
- High Efficiency
- High Intensity Output
- Reel Packing

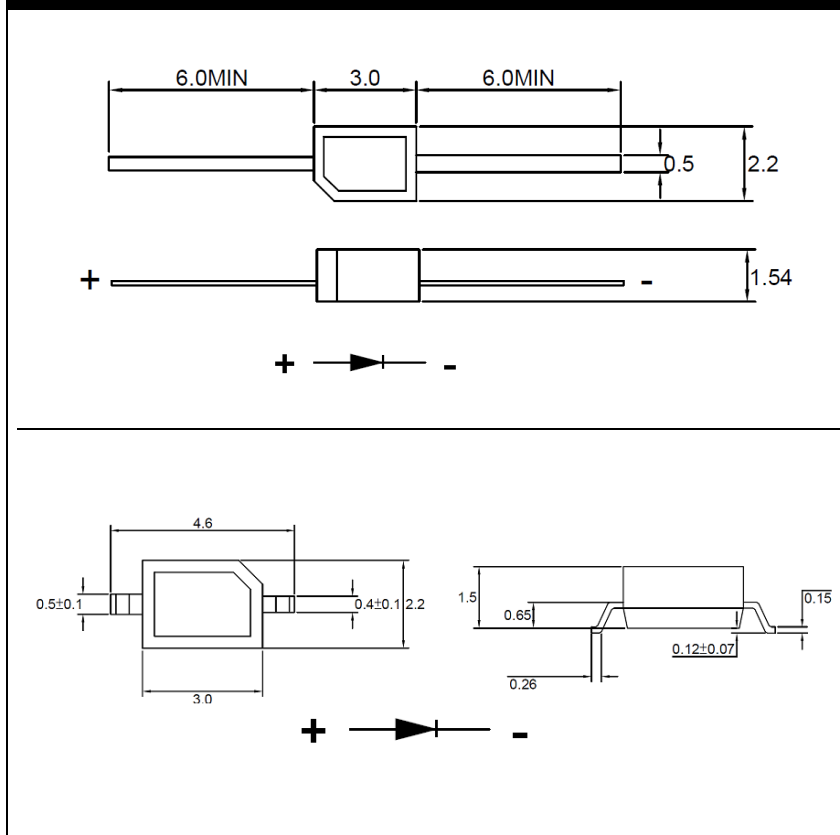
Applications:

- Indication Light
- Traffic Signal
- Information Board
- Decoration Lighting
- Signal and Switch

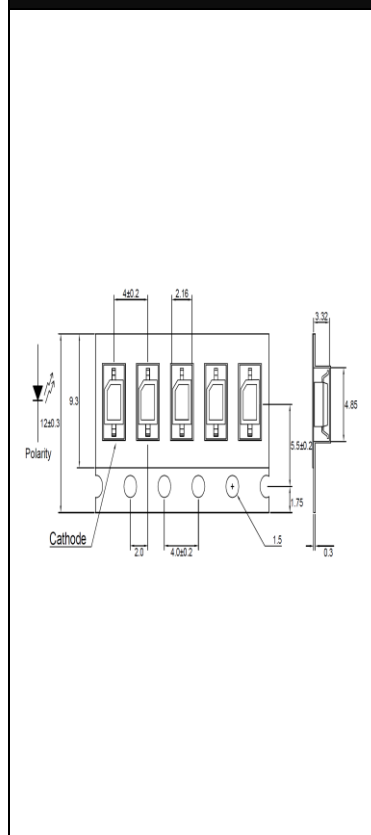
Colour Electrical & Optical Characteristics (typ. at 20mA)

Order Code	Colour	WL (nm)	2θ _{1/2} (°)	I _V (mcd)	V _F (V)	I _F (mA)	I _{MAX} (mA)
NOR25S76	Red	620-640nm	120	300	1.9	20	30
NOA25S74	Amber	598-615nm	120	300	2.1	20	30
NOY25S78	Yellow	585-595nm	85	40	2.2	20	30
NOG25S77	Green	560-570nm	85	20	2.1	20	30
NOB25S75	Blue	460-480nm	120	300	3.5	20	30

Package Dimensions (mm)



Packing Dimension



Lead Frame

3228 RGB



Features:

- Top View
- Low Power LED
- Multi-Colour
- High Efficiency
- High Intensity Output
- Reel Packing

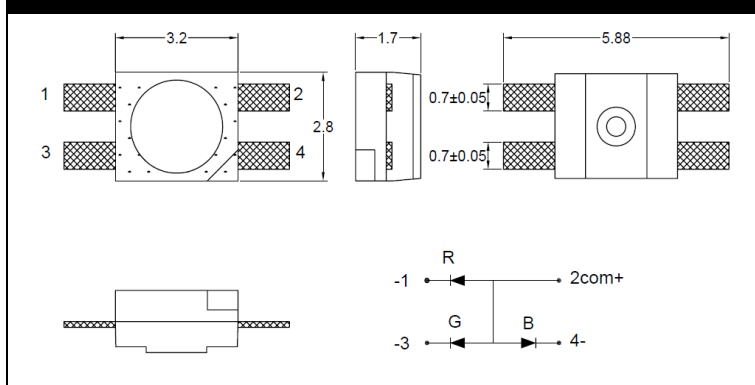
Applications:

- Indication Light
- Traffic Signal
- Information Board
- Decoration Lighting
- Signal and Switch

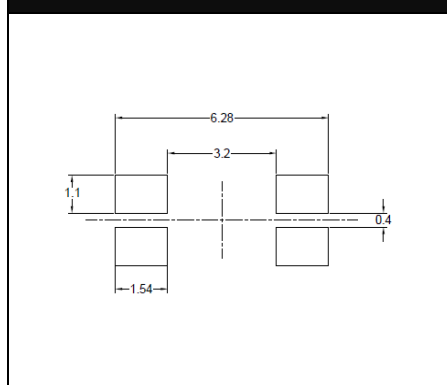
Colour Electrical & Optical Characteristics

Order Code	Colour	WL (nm)	$2\theta_{1/2}$ (°)	I_V (mcd)	V_F (V)	I_F (mA)
NOM25S7	Red/Green/Blue ■ ■ ■	625/525/465	120	110/400/110	1.8/2.7/2.8	2/2/2

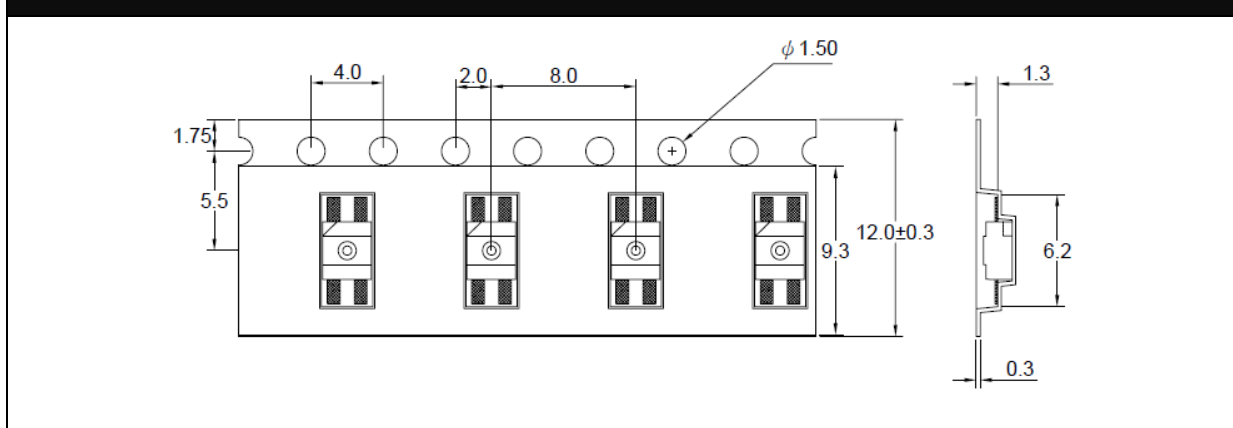
Package Dimensions (mm)



Recommended Solder Pattern



Packing Dimension





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