

## Product Profile

- **Light Emitting Diodes (LEDs)**

- Single Colour
- Dual Colour
- Multi Colour



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## Light Emitting Diodes (LEDs)

## Product Range

- Light Emitting Diodes (LEDs)
- 7-Segment Displays
- Dot Matrix Displays
- LED Bulbs
- LED Display Panels
- Electrolytic Capacitors

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# Light Emitting Diodes - Single Colour (2 leaded package)

Operating Temperature ( $T_{opr}$ ) -25°C to 80°C; Storage Temperature ( $T_{stg}$ ) -40°C to 40°C

Colour	Part Number Series	Chip Material	Lens Colour	Luminous Intensity at $I_f=20\text{mA}$ (mcd)	Power Dissipation (mW)	Dominant Wavelength (nm)
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## Size 3 $\phi$ x 4.3 ~ 6.1 (h) mm

Hi-Red	32x70D-4001	GaP/GaP	Red diffused	1 ~ 2	80	700
Hi-Red	32x70T-4001	GaP/GaP	Red transparent	2 ~ 10	80	700
Hi-Eff Red	32x71D-4001	GaAsP/Gap	Red diffused	5 ~ 20	80	640
Hi-Eff Red	32x71T-4001	GaAsP/Gap	Red transparent	40 ~ 150	80	640
Yellow Green	32x41D-4001	GaP/GaP	Green diffused	3 ~ 10	80	570
Yellow Green	32x41T-4001	GaP/GaP	Green transparent	10 ~ 50	80	570
Yellow	32x51D-4001	GaAsP/Gap	Yellow diffused	3 ~ 10	80	585
Yellow	32x51T-4001	GaAsP/Gap	Yellow transparent	10 ~ 50	80	585
Orange	32x61D-4001	GaAsP/Gap	Orange diffused	3 ~ 10	80	605
Orange	32x61T-4001	GaAsP/Gap	Orange transparent	10 ~ 50	80	605
Blue	32x11D-4001	GaN	Blue diffused	50 ~ 200	170	470
Blue	32x11C-4001	GaN	Water	250 ~ 1000	170	470
Blue Green	32x22C-4001	GaN	Water	1000 ~ 5000	170	505
Green	32x32C-4001	GaN	Water	1000 ~ 5000	80	525
White	32x82C-4001	GaN	Water	500 ~ 2000		
White	32x82W-4001	GaN	Water diffused	100 ~ 500		

## Size 4 $\phi$ x 6.0 ~ 6.3 (h) mm

Hi-Red	42x70D-4001	GaP/GaP	Red diffused	2 ~ 3	80	700
Hi-Red	42x70T-4001	GaP/GaP	Red transparent	10 ~ 12	80	700
Hi-Eff Red	42x71D-4001	GaAsP/Gap	Red diffused	100 ~ 500	80	640
Hi-Eff Red	42x71T-4001	GaAsP/Gap	Red transparent	250 ~ 400	80	640
Yellow Green	42x41D-4001	GaP/GaP	Green diffused	25 ~ 50	80	570
Yellow Green	42x41T-4001	GaP/GaP	Green transparent	100 ~ 200	80	570
Yellow	42x51D-4001	GaAsP/Gap	Yellow diffused	25 ~ 50	80	585
Yellow	42x51T-4001	GaAsP/Gap	Yellow transparent	100 ~ 200	80	585
Orange	42x61D-4001	GaAsP/Gap	Orange diffused	25 ~ 50	80	605
Orange	42x61T-4001	GaAsP/Gap	Orange transparent	100 ~ 200	80	605
Blue	42x11D-4001	GaN	Blue diffused	300 ~ 500	170	470
Blue	42x11C-4001	GaN	Water	1200 ~ 2000	170	470
Blue Green	42x22C-4001	GaN	Water	6000 ~ 10000	170	505
Green	42x32C-4001	GaN	Water	6000 ~ 10000	80	525
White	42x82C-4001	GaN	Water	3000 ~ 8000		
White	42x82W-4001	GaN	Water diffused	800 ~ 1000		

## Size 5 $\phi$ x 4.4 ~ 8.7 (h) mm

Hi-Red	52x70D-4001	GaP/GaP	Red diffused	1 ~ 5	80	700
Hi-Red	52x70T-4001	GaP/GaP	Red transparent	2 ~ 20	80	700
Hi-Eff Red	52x71D-4001	GaAsP/Gap	Red diffused	5 ~ 200	80	640
Hi-Eff Red	52x71T-4001	GaAsP/Gap	Red transparent	40 ~ 800	80	640
Yellow Green	52x41D-4001	GaP/GaP	Green diffused	3 ~ 50	80	570
Yellow Green	52x41T-4001	GaP/GaP	Green transparent	10 ~ 200	80	570
Yellow	52x51D-4001	GaAsP/Gap	Yellow diffused	3 ~ 50	80	585
Yellow	52x51T-4001	GaAsP/Gap	Yellow transparent	10 ~ 200	80	585
Orange	52x61D-4001	GaAsP/Gap	Orange diffused	3 ~ 50	80	605
Orange	52x61T-4001	GaAsP/Gap	Orange transparent	10 ~ 200	80	605
Blue	52x11D-4001	GaN	Blue diffused	50 ~ 1000	170	470
Blue	52x11C-4001	GaN	Water	250 ~ 3000	170	470
Blue Green	52x22C-4001	GaN	Water	1000 ~ 10000	170	505
Green	52x32C-4001	GaN	Water	1000 ~ 10000	80	525
White	52x82C-4001	GaN	Water	500 ~ 8000		
White	52x82W-4001	GaN	Water diffused	100 ~ 1500		

## Size 6 $\phi$ x 4.0 ~ 10.0 (h) mm

Hi-Red	62x70D-4001	GaP/GaP	Red diffused	1	80	700
Hi-Red	62x70T-4001	GaP/GaP	Red transparent	2	80	700
Hi-Eff Red	62x71D-4001	GaAsP/Gap	Red diffused	5 ~ 20	80	640
Hi-Eff Red	62x71T-4001	GaAsP/Gap	Red transparent	25 ~ 80	80	640
Yellow Green	62x41D-4001	GaP/GaP	Green diffused	3 ~ 4	80	570
Yellow Green	62x41T-4001	GaP/GaP	Green transparent	10 ~ 20	80	570
Yellow	62x51D-4001	GaAsP/Gap	Yellow diffused	3 ~ 4	80	585
Yellow	62x51T-4001	GaAsP/Gap	Yellow transparent	10 ~ 20	80	585

Note: Variable x denotes package type.

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Colour	Part Number Series	Chip Material	Lens Colour	Luminous Intensity at $I_f=20\text{mA}$ (mcd)	Power Dissipation (mW)	Dominant Wavelength (nm)
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**Size 6  $\phi$  x 4.0 ~ 10.0 (h) mm**

Orange	62x61D-4001	GaAsP/Gap	Orange diffused	3 ~ 4	80	605
Orange	62x61T-4001	GaAsP/Gap	Orange transparent	10 ~ 20	80	605
Blue	62x11D-4001	GaN	Blue diffused	50 ~ 800	170	470
Blue	62x11C-4001	GaN	Water	200 ~ 250	170	470
Blue Green	62x22C-4001	GaN	Water	500 ~ 800	170	505
Green	62x32C-4001	GaN	Water	500 ~ 800	80	525
White	62x82C-4001	GaN	Water	300 ~ 400		
White	62x82W-4001	GaN	Water diffused	100 ~ 150		

**Size 7  $\phi$  x 1.1 ~ 1.4 (h) mm**

Hi-Red	72x70D-4001	GaP/GaP	Red diffused	3 ~ 4	80	700
Hi-Red	72x70T-4001	GaP/GaP	Red transparent	12 ~ 15	80	700
Hi-Eff Red	72x71D-4001	GaAsP/Gap	Red diffused	100	80	640
Hi-Eff Red	72x71T-4001	GaAsP/Gap	Red transparent	400 ~ 500	80	640
Yellow Green	72x41D-4001	GaP/GaP	Green diffused	40 ~ 50	80	570
Yellow Green	72x41T-4001	GaP/GaP	Green transparent	150 ~ 200	80	570
Yellow	72x51D-4001	GaAsP/Gap	Yellow diffused	40 ~ 50	80	585
Yellow	72x51T-4001	GaAsP/Gap	Yellow transparent	150 ~ 200	80	585
Orange	72x61D-4001	GaAsP/Gap	Orange diffused	40 ~ 50	80	605
Orange	72x61T-4001	GaAsP/Gap	Orange transparent	150 ~ 200	80	605
Blue	72x11D-4001	GaN	Blue diffused	500 ~ 600	170	470
Blue	72x11C-4001	GaN	Water	2500 ~ 3000	170	470
Blue Green	72x22C-4001	GaN	Water	8000 ~ 9000	170	505
Green	72x32C-4001	GaN	Water	8000 ~ 9000	80	525
White	72x82C-4001	GaN	Water	5000 ~ 5500		
White	72x82W-4001	GaN	Water diffused	1000 ~ 1200		

Note: Variable x denotes package type.

## Light Emitting Diodes - Dual Colour (3 leaded package)

Operating Temperature ( $T_{op}$ ) -25°C to 80°C; Storage Temperature ( $T_{stg}$ ) -40°C to 40°C

Colour	Part Number Series	Chip Material	Lens Colour	Luminous Intensity at $I_f=20\text{mA}$ (mcd)	Power Dissipation (mW)	Dominant Wavelength (nm)
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**Size 3  $\phi$  x 5.32 (h) mm**

Hi-Red	32D4711W-9001	GaP/GaP	Water diffused	5	80	700
Yellow Green		GaP/GaP		15	80	570
Hi-Red	32D5711W-9001	GaP/GaP	Water diffused	5	80	700
Yellow		GaAsP/Gap		15	80	585
Hi-Red	32D6711W-9001	GaP/Gap	Water diffused	5	80	700
Orange		GaAsP/Gap		15	80	605
Yellow Green	32D4511W-9001	GaP/GaP	Water diffused	15	80	570
Yellow		GaAsP/Gap		15	80	585
Hi-Eff Red	32D1711W-9001	GaAsP/Gap	Water diffused	300	80	635
Blue		GaN		200	170	470
Hi-Eff Red	32D2755W-9001	GaAsP/Gap	Water diffused	300	80	635
Blue Green		GaN		600	170	505
Hi-Eff Red	32D3755W-9001	GaAsP/Gap	Water diffused	300	80	635
Blue Green		GaN		600	170	525
Blue	32D1325W-9001	GaN	Water diffused	200	170	470
Blue Green		GaN		600	170	525

**Size 5  $\phi$  x 8.60 (h) mm**

Hi-Red	52K4711W-9001	GaP/GaP	Water diffused	8	80	700
Yellow Green		GaP/GaP		20	80	570
Hi-Red	52K5711W-9001	GaP/GaP	Water diffused	8	80	700
Yellow		GaAsP/Gap		20	80	585
Hi-Red	52K6711W-9001	GaP/Gap	Water diffused	8	80	700
Orange		GaAsP/Gap		20	80	605
Yellow Green	52K4511W-9001	GaP/GaP	Water diffused	20	80	570
Yellow		GaAsP/Gap		20	80	585
Hi-Eff Red	52K1711W-9001	GaAsP/Gap	Water diffused	800	80	635
Blue		GaN		400	170	470
Hi-Eff Red	52K2755W-9001	GaAsP/Gap	Water diffused	800	80	635
Blue Green		GaN		1000	170	505

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## ... Light Emitting Diodes - Dual Colour (3 leaded package)

Operating Temperature ( $T_{opr}$ ) -25°C to 80°C; Storage Temperature ( $T_{stg}$ ) -40°C to 40°C

Colour	Part Number Series	Chip Material	Lens Colour	Luminous Intensity at $I_f=20\text{mA}$ (mcd)	Power Dissipation (mW)	Dominant Wavelength (nm)
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### Size 5 $\phi$ x 8.60 (h) mm

Hi-Eff Red	52K3755W-9001	GaAsP/GaP	Water diffused	800	80	635
Blue Green		GaN		1000	170	525
Blue	52K1325W-9001	GaN	Water diffused	400	170	470
Blue Green		GaN		1000	170	525

### Size 5 (L) x 7 ~ 7.7 (h) mm

Hi-Red	62x4711W-9001	GaP/GaP	Water diffused	2	80	700
Yellow Green		GaP/GaP		10	80	570
Hi-Red	62x5711W-9001	GaP/GaP	Water diffused	2	80	700
Yellow		GaAsP/GaP		10	80	585
Hi-Red	62x6711W-9001	GaP/GaP	Water diffused	2	80	700
Orange		GaAsP/GaP		10	80	605
Yellow Green	62x4511W-9001	GaP/GaP	Water diffused	10	80	570
Yellow		GaAsP/GaP		10	80	585
Hi-Eff Red	62x1711W-9001	GaAsP/GaP	Water diffused	200	80	635
Blue		GaN		100	170	470
Hi-Eff Red	62x2755W-9001	GaAsP/GaP	Water diffused	200	80	635
Blue Green		GaN		300	170	505
Hi-Eff Red	62x3755W-9001	GaAsP/GaP	Water diffused	200	80	635
Blue Green		GaN		300	170	525
Blue	62x1325W-9001	GaN	Water diffused	100	170	470
Blue Green		GaN		300	170	525

### Size 8 ~ 10 $\phi$ x 11 ~ 13 (h) mm

Hi-Red	72x4711W-9001	GaP/GaP	Water diffused	6	80	700
Yellow Green		GaP/GaP		15	80	570
Hi-Red	72x5711W-9001	GaP/GaP	Water diffused	6	80	700
Yellow		GaAsP/GaP		15	80	585
Hi-Red	72x6711W-9001	GaP/GaP	Water diffused	5	80	700
Orange		GaAsP/GaP		15	80	605
Yellow Green	72x4511W-9001	GaP/GaP	Water diffused	15	80	570
Yellow		GaAsP/GaP		15	80	585
Hi-Eff Red	72x1711W-9001	GaAsP/GaP	Water diffused	500	80	635
Blue		GaN		300	170	470
Hi-Eff Red	72x2755W-9001	GaAsP/GaP	Water diffused	600	80	635
Blue Green		GaN		800	170	505
Hi-Eff Red	72x3755W-9001	GaAsP/GaP	Water diffused	600	80	635
Blue Green		GaN		800	170	525
Blue	72x1325W-9001	GaN	Water diffused	300	170	470
Blue Green		GaN		800	170	525

Note: Variable x denotes package type.

## Light Emitting Diodes - Multi Colour (4 leaded package)

Operating Temperature ( $T_{opr}$ ) -25°C to 80°C; Storage Temperature ( $T_{stg}$ ) -40°C to 40°C

Colour	Part Number Series	Chip Material	Lens Colour	Luminous Intensity at $I_f=20\text{mA}$ (mcd)	Power Dissipation (mW)	Dominant Wavelength (nm)
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### Size 5 $\phi$ x 8.60 (h) mm

RGB	52RGB255C-9001	AlGaInP	Water	5000		635
		GaN		3000		470
		GaN		8000		525
RGB	52RGB255W-9001	AlGaInP	Water diffused	800		635
		GaN		500		470
		GaN		1000		525

RGB - Red/Green/Blue

This Selection Guide contains a representative list of our comprehensive range with some of their critical specifications. This Selection Guide is in no way exhaustive. CDIL's sales team invites request for product information and/or detailed specifications. We are constantly expanding our range of products and support, in line with global requirements. These products are not designed for use in life saving/support appliances or systems.

**Components Disposal Instructions:** All products are RoHS compliant. Customers are requested to please dispose as per prevailing Environmental Legislation of their Country. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).