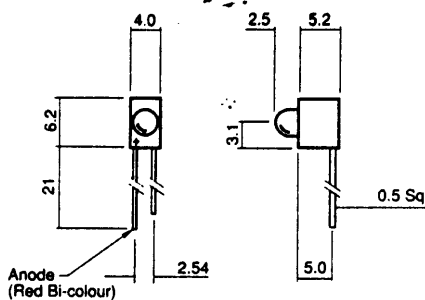


637-62270 981

# 103 Series: | Ø 3 mm LED 90° PCB Mounting

- Low current versions
- 12 volt models available
- MLQ 50
- MTBF 100,000 hrs, low current models 250,000 hrs



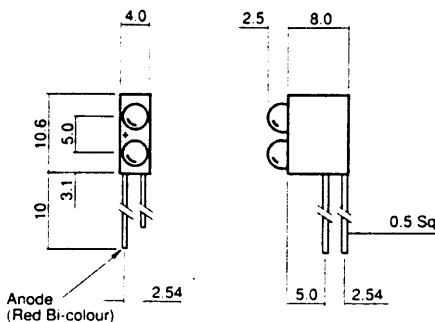
Scale 1 : 1  
Dimensions in mm (Typical)

## Ordering information and technical characteristics (Ta = 25°C)

Order code	Colour	Typ Fwd Voltage Vf @ Iopr	Forward Current Iopr	Luminous Intensity Iv @ Iopr	Wave Length λp	Viewing Angle 2θ1/2	Operating Temp Topr	Storage Temp Tstg
103 - 305 - 01	Red	1.8	2	1.5	650	30		
103 - 311 - 01	Yellow	1.9	2	1.5	585	30		
103 - 314 - 01	Green	1.9	2	2.0	563	30		
103 - 305 - 04	Red	2.1	20	33	650	30	- 40	- 50
103 - 311 - 04	Yellow	2.2	20	33	585	30	to	to
103 - 314 - 04	Green	2.2	20	47	563	30	+ 85	+ 100
103 - 381 - 20	Red	5.0	10	8.0	635	60		
103 - 382 - 20	Yellow	5.0	10	8.0	590	60		
103 - 383 - 20	Green	5.0	10	8.0	565	60		
103 - 330 - 04	Red/Green Bi-Colour	2.0 2.2	20 20	12 12	635 565	50 50		
	Diffused	V	mA	mcd	nm	deg	°C	°C

# 109 Series: | Ø 3 mm LED 90° PCB Mounting Duplex

- Save board space and assembly time
- Blue available
- MLQ 50
- Colour combinations to order
- 12 volt models available
- MTBF 100,000 hrs, low current models 250,000 hrs



Scale 1 : 1  
Dimensions in mm (Typical)

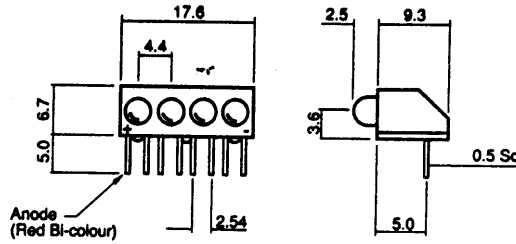
## Ordering information and technical characteristics (Ta = 25°C)

Order code	Colour	Typ Fwd Voltage Vf @ Iopr	Forward Current Iopr	Luminous Intensity Iv @ Iopr	Wave Length λp	Viewing Angle 2θ1/2	Operating Temp Topr	Storage Temp Tstg
109 - 305 - 01	Red	1.8	2	1.5	650	30		
109 - 311 - 01	Yellow	1.9	2	1.5	585	30		
109 - 314 - 01	Green	1.9	2	2.0	563	30		
109 - 305 - 04	Red	2.1	20	33	650	30	- 40	- 50
109 - 311 - 04	Yellow	2.2	20	33	585	30	to	to
109 - 314 - 04	Green	2.2	20	47	563	30	+ 85	+ 100
109 - 381 - 20	Red	5.0	10	8.0	635	60		
109 - 382 - 20	Yellow	5.0	10	8.0	590	60		
109 - 383 - 20	Green	5.0	10	8.0	565	60		
109 - 330 - 04	Red/Green Bi-Colour	2.0 2.2	20 20	12 12	635 565	50 50		
	Diffused	V	mA	mcd	nm	deg	°C	°C

# 107 Series: | Ø 3 mm LED 90° PCB Mounting 4 Array

- Multi-colour permutations
- Suitable for flow soldering
- 12 volt range available
- MLQ 20
- MTBF 100,000 hrs, low current models 250,000 hrs

Scale 1 : 1  
Dimensions in mm (Typical)



107-000-20-5C  
RED/GREEN/RED/GRE  
S/B VDC.

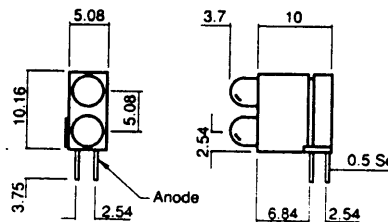
## Ordering information and technical characteristics (Ta = 25°C)

Order code	Colour	Typ Fwd Voltage Vf @ Iopr	Forward Current Iopr	Luminous Intensity Iv @ Iopr	Wave Length λp	Viewing Angle 2θ1/2	Operating Temp Topr	Storage Temp Tstg
107 - 305 - 01	Red	1.8	2	1.5	650	30		
107 - 311 - 01	Yellow	1.9	2	1.5	585	30		
107 - 314 - 01	Green	1.9	2	2.0	563	30		
107 - 305 - 04	Red	2.1	20	33	650	30	- 40	- 50
107 - 311 - 04	Yellow	2.2	20	33	585	30	to	to
107 - 314 - 04	Green	2.2	20	47	563	30	+ 85	+ 100
107 - 381 - 20	Red	5.0	10	8.0	635	60		
107 - 382 - 20	Yellow	5.0	10	8.0	590	60		
107 - 383 - 20	Green	5.0	10	8.0	565	60		
107 - 330 - 04	Red/Green Bi-colour	2.0	20	12	635	50		
	Diffused	V	mA	mcd	nm	deg	°C	°C

# 122 Series: | Ø 3 mm LED 90° PCB Mounting Duplex

- DIN std compatible
- 3 and 8 way models
- UL94 V-0 flammability rating
- MLQ 50
- Colour combinations to order
- MTBF 100,000 hrs, low current models 250,000 hrs

Scale 1 : 1  
Dimensions in mm (Typical)

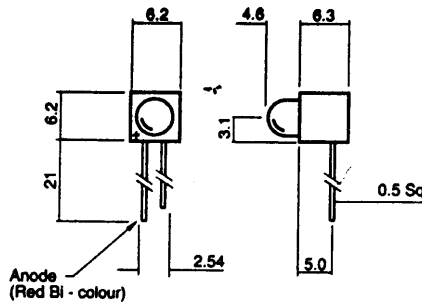


## Ordering information and technical characteristics (Ta = 25°C)

Order code	Colour	Typ Fwd Voltage Vf @ Iopr	Forward Current Iopr	Luminous Intensity Iv @ Iopr	Wave Length λp	Viewing Angle 2θ1/2	Operating Temp Topr	Storage Temp Tstg
122 - 305 - 01	Red	1.8	2	1.5	650	30		
122 - 311 - 01	Yellow	1.9	2	1.5	585	30	- 40	- 50
122 - 314 - 01	Green	1.9	2	2.0	563	30	to	to
122 - 305 - 04	Red	2.1	20	33	650	30	+ 85	+ 100
122 - 311 - 04	Yellow	2.2	20	33	585	30		
122 - 314 - 04	Green	2.2	20	47	563	30		
	Diffused	V	mA	mcd	nm	deg	°C	°C

104 Series: |  $\varnothing$  5 mm LED 90° PCB Mounting

- Designed as a rapid assembly status indicator for card edge mounting
- Low current range
- MLQ 20
- All colours including blue available
- MTBF 100,000 hrs, low current models 250,000 hrs



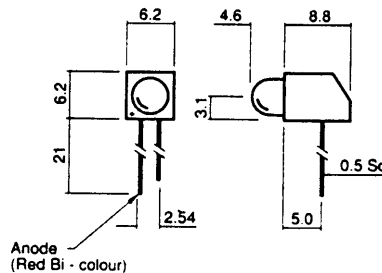
Scale 1 : 1  
Dimensions in mm (Typical)

## Ordering information and technical characteristics (Ta = 25°C)

Order code	Colour	Typ Fwd Voltage Vf @ Iopr	Forward Current Iopr	Luminous Intensity Iv @ Iopr	Wave Length $\lambda_p$	Viewing Angle 2 $\theta$ 1/2	Operating Temp Topr	Storage Temp Tstg
104 - 505 - 01	Red	1.8	2	1.5	650	30		
104 - 511 - 01	Yellow	1.9	2	1.5	585	30		
104 - 514 - 01	Green	1.9	2	3.0	563	30		
104 - 505 - 04	Red	2.1	20	33	650	30	- 40	- 50
104 - 511 - 04	Yellow	2.2	20	33	585	30	to	to
104 - 514 - 04	Green	2.2	20	68	563	30	+ 85	+ 100
104 - 581 - 20	Red	5.0	10	8.0	635	50		
104 - 582 - 20	Yellow	5.0	10	8.0	590	50		
104 - 583 - 20	Green	5.0	10	8.0	565	50		
104 - 530 - 04	Red/Green	2.0	20	12	635	50		
	Bi-Colour	2.2	20	12	565	50		
	Diffused	V	mA	mcd	nm	deg	°C	°C

106 Series: |  $\varnothing$  5 mm LED 90° PCB Mounting

- Indelible polarity identification
- 12 volt range available
- MLQ 20
- MTBF 100,000 hrs, low current models 250,000 hrs



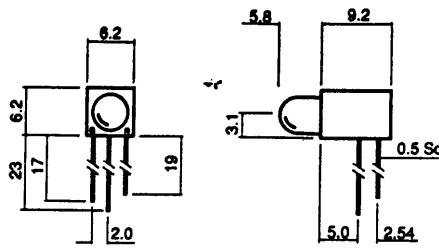
Scale 1 : 1  
Dimensions in mm (Typical)

## Ordering information and technical characteristics (Ta = 25°C)

Order code	Colour	Typ Fwd Voltage Vf @ Iopr	Forward Current Iopr	Luminous Intensity Iv @ Iopr	Wave Length $\lambda_p$	Viewing Angle 2 $\theta$ 1/2	Operating Temp Topr	Storage Temp Tstg
106 - 505 - 01	Red	1.8	2	1.5	650	30		
106 - 511 - 01	Yellow	1.9	2	1.5	585	30		
106 - 514 - 01	Green	1.9	2	3.0	563	30		
106 - 505 - 04	Red	2.1	20	33	650	30	- 40	- 50
106 - 511 - 04	Yellow	2.2	20	33	585	30	to	to
106 - 514 - 04	Green	2.2	20	68	563	30	+ 85	+ 100
106 - 581 - 20	Red	5.0	10	8.0	635	50		
106 - 582 - 20	Yellow	5.0	10	8.0	590	50		
106 - 583 - 20	Green	5.0	10	8.0	565	50		
106 - 530 - 04	Red/Green	2.0	20	12	635	50		
	Bi-Colour	2.2	20	12	565	50		
	Diffused	V	mA	mcd	nm	deg	°C	°C

# 104 Series: | Ø 5 mm LED 90° PCB Mounting Bi/Tri Colour

- Can be used as red/yellow/green tri-colour
- 1 LED in place of 3
- 3 lead with common cathode
- Diffused white lens epoxy
- MLQ 20
- MTBF 100,000 hrs, low current models 250,000 hrs



Scale 1 : 1  
Dimensions in mm (Typical)

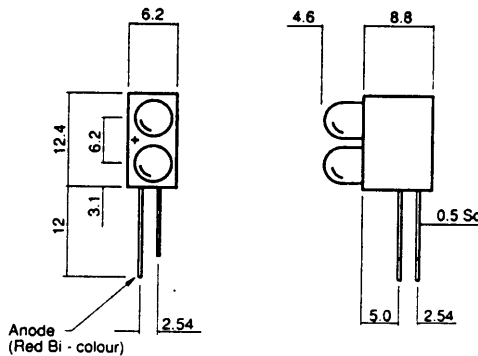
G = Green Anode  
R = Red Anode

## Ordering information and technical characteristics (Ta = 25°C)

Order code	Colour	Typ Fwd Voltage Vf @ Iopr	Forward Current Iopr	Luminous Intensity Iv @ Iopr	Wave Length λp	Viewing Angle 2θ1/2	Operating Temp Topr	Storage Temp Tstg
104 - 535 - 04	Red/Green Bi-colour	2.0 2.2	20	40	635 585	50	- 40 to + 85	- 50 to + 100
	Diffused	V	mA	mcd	nm	deg	°C	°C

# 110 Series: | Ø 5 mm LED 90° PCB Mounting Duplex

- Bi-colour and integral resistor models available
- Low current range
- MLQ 20
- Colour combinations to order
- MTBF 100,000 hrs, low current models 250,000 hrs



Scale 1 : 1  
Dimensions in mm (Typical)

Anode (Red Bi - colour)

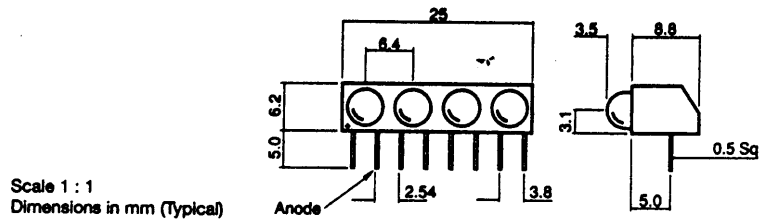
110-000-20-50 (5/vv)  
110-000-01-50 (2m)  
RED - TOP  
GREEN - BOTTOM.

## Ordering information and technical characteristics (Ta = 25°C)

Order code	Colour	Typ Fwd Voltage Vf @ Iopr	Forward Current Iopr	Luminous Intensity Iv @ Iopr	Wave Length λp	Viewing Angle 2θ1/2	Operating Temp Topr	Storage Temp Tstg
110 - 505 - 01	Red	1.8	2	1.5	650	30		
110 - 511 - 01	Yellow	1.9	2	1.5	585	30		
110 - 514 - 01	Green	1.9	2	3.0	563	30		
110 - 505 - 04	Red	2.1	20	33	650	30	- 40	- 50
110 - 511 - 04	Yellow	2.2	20	33	585	30	to	to
110 - 514 - 04	Green	2.2	20	68	563	30	+ 85	+ 100
110 - 581 - 20	Red	5.0	10	8.0	635	50		
110 - 582 - 20	Yellow	5.0	10	8.0	590	50		
110 - 583 - 20	Green	5.0	10	8.0	565	50		
110 - 530 - 04	Red/Green Bi-Colour	2.0 2.2	20	12	635 585	50		
	Diffused	V	mA	mcd	nm	deg	°C	°C

# 108 Series: | Ø 5 mm LED 90° PCB Mount 4 Array Low Profile

- Ideal for edge of card status indication
- Low current range
- MLQ 20
- Multi-colour combination
- MTBF 100,000 hrs, low current models 250,000 hrs

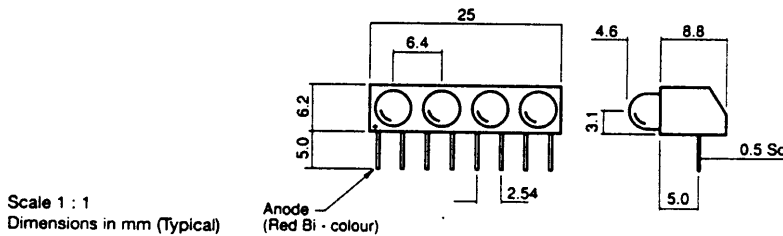


## Ordering information and technical characteristics (Ta = 25°C)

Order code	Colour	Typ Fwd Voltage Vf @ Iopr	Forward Current Iopr	Luminous Intensity Iv @ Iopr	Wave Length λp	Viewing Angle 2θ1/2	Operating Temp Topr	Storage Temp Tstg
108 - 555 - 01	Red	1.8	2	0.5	650	44		
108 - 561 - 01	Yellow	1.9	2	0.5	585	44	- 40	- 50
108 - 564 - 01	Green	1.9	2	1.0	563	44	to	to
108 - 555 - 04	Red	2.1	20	13	650	44	+ 85	+ 100
108 - 561 - 04	Yellow	2.2	20	13	585	44		
108 - 565 - 04	Green	2.2	20	20	563	44		
	Diffused	V	mA	mcd	nm	deg	°C	°C

# 108 Series: | Ø 5 mm LED 90° PCB Mounting 4 Array

- Ease of handling reduces assembly time
- Blue available
- 12 volt models available
- MLQ 20
- MTBF 100,000 hrs, low current models 250,000 hrs



108-000-20-50  
 108-000-01-50  
 RED/RED/YELLOW/YELLOW

## Ordering information and technical characteristics (Ta = 25°C)

Order code	Colour	Typ Fwd Voltage Vf @ Iopr	Forward Current Iopr	Luminous Intensity Iv @ Iopr	Wave Length λp	Viewing Angle 2θ1/2	Operating Temp Topr	Storage Temp Tstg
108 - 505 - 01	Red	1.8	2	1.5	650	30		
108 - 511 - 01	Yellow	1.9	2	1.5	585	30		
108 - 514 - 01	Green	1.9	2	3.0	563	30		
108 - 505 - 04	Red	2.1	20	33	650	30	- 40	- 50
108 - 511 - 04	Yellow	2.2	20	33	585	30	to	to
108 - 514 - 04	Green	2.2	20	68	563	30	+ 85	+ 100
108 - 581 - 20	Red	5.0	10	8.0	635	50		
108 - 582 - 20	Yellow	5.0	10	8.0	590	50		
108 - 583 - 20	Green	5.0	10	8.0	565	50		
108 - 530 - 04	Red/Green Bi-Colour	2.0 2.2	20 20	12 12	635 565	50 50		
	Diffused	V	mA	mcd	nm	deg	°C	°C