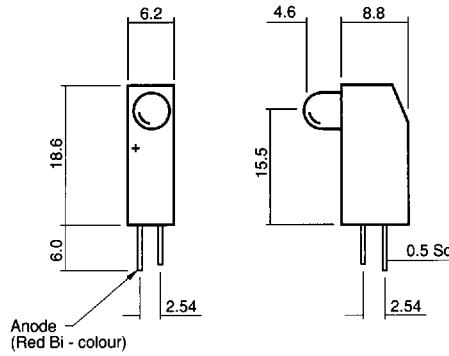


# 111 Series: | Ø 5 mm LED 90° PCB Mounting (High Level)

- Improved stability
- Ideal for special designs
- Low current range
- MLQ 20
- MTBF 100,000 hrs, low current models 250,000 hrs

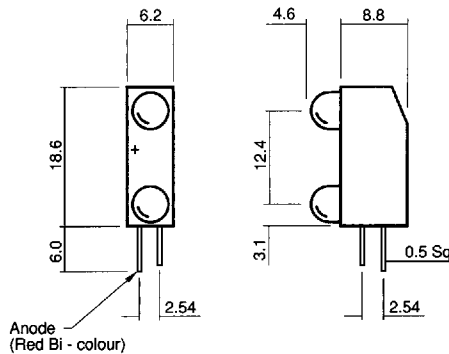


## Ordering information and technical characteristics (Ta = 25°C)

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
111 - 505 - 01	Red	1.8	2	1.5	650	30		
111 - 511 - 01	Yellow	1.9	2	1.5	585	30		
111 - 514 - 01	Green	1.9	2	3.0	563	30		
111 - 505 - 04	Red	2.1	20	33	650	30	- 40	- 50
111 - 511 - 04	Yellow	2.2	20	33	585	30	to	to
111 - 514 - 04	Green	2.2	20	68	563	30	+ 85	+ 100
111 - 581 - 20	Red	5.0	10	8.0	635	50		
111 - 582 - 20	Yellow	5.0	10	8.0	590	50		
111 - 583 - 20	Green	5.0	10	8.0	565	50		
111 - 530 - 04	Red/Green Bi-Colour	2.0	20	12	635	50		
		2.2	20	12	565	50		
	Diffused	V	mA	mcd	nm	deg	°C	°C

# 112 Series: | Ø 5 mm LED 90° PCB Mount Duplex (High Level)

- Multi-colour permutations available
- Low current range
- 12 V models available
- MLQ 20
- 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
112 - 505 - 01	Red	1.8	2	1.5	650	30		
112 - 511 - 01	Yellow	1.9	2	1.5	585	30		
112 - 514 - 01	Green	1.9	2	3.0	563	30		
112 - 505 - 04	Red	2.1	20	33	650	30	- 40	- 50
112 - 511 - 04	Yellow	2.2	20	33	585	30	to	to
112 - 514 - 04	Green	2.2	20	68	563	30	+ 85	+ 100
112 - 581 - 20	Red	5.0	10	8.0	635	50		
112 - 582 - 20	Yellow	5.0	10	8.0	590	50		
112 - 583 - 20	Green	5.0	10	8.0	565	50		
112 - 530 - 04	Red/Green Bi-Colour	2.0	20	12	635	50		
		2.2	20	12	565	50		
	Diffused	V	mA	mcd	nm	deg	°C	°C