

Red Laser Module

Wide Temperature Range

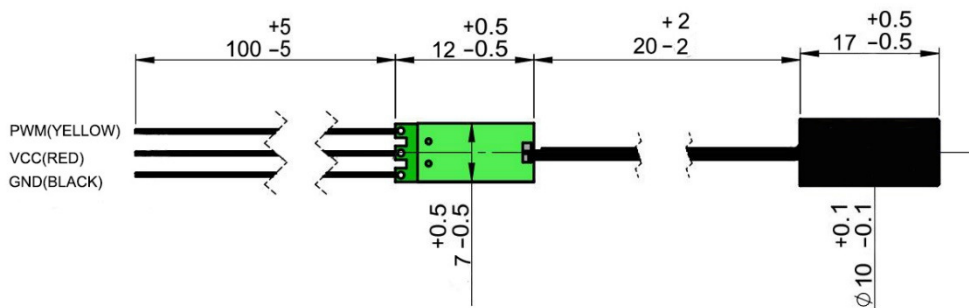


R650D001-10x17-0.4-(-10-60)-10-B

Features

- Fast Rise Time
- High Reliability
- Isolated Housing
- Wide Temperature Range

Dimensions (Unit: mm)



Specifications				
Model Number		R650D001-10x17-0.4-(-10-60)-10-B		
Mechanical Specifications		Min	Typ	Max
Laser Head	Diameter (mm)	9.9	10	10.1
	Length (mm)	16.5	17	17.5
	Weight (g)	-	8	-
PCB Size (mm)		7x12		
Housing Material		Black Anodized Aluminium		
Optical Specifications		Min	Typ	Max
Wavelength (nm) at 25°C		645	650	655
Output Power (mW) at 25°C		-	0.9	-
Power Stability over Temperature Range		0.7	-	0.95
Output Power Mode		CW		
Laser Class		2		

Beam Specifications		Min	Typ	Max
Beam Divergence (mrad) ⁽¹⁾		-	0.4	0.5
Beam Alignment Tolerance	Position (Δr , mm) ⁽²⁾	-	0.3	0.5
	Off-axis Angle (mrad) ⁽³⁾	-	5	10
Beam Size at Output Window (mm)		-	2 x 5	-
Beam Mode Longitude		Multi		
Beam Mode Transverse		Near TEM00		
Electrical Specifications		Min	Typ	Max
PCB Type		APC - TTL		
Voltage (DC, V)		-	5.0	-
Operating Current (mA) at 5V ⁽⁴⁾		-	-	50
Housing Isolation		Yes		
ESD protection		No		
Wire Length (mm)		20 / 100 +/- 5		
Wire Type		28AWG		
Modulation Frequency (kHz)		<10		
Reverse Voltage Protection		Yes		
Reliability		Min	Typ	Max
Operating Case Temperature Range (°C)		-10	-	60
Rise Time (Seconds) ⁽⁵⁾		-	0.1	0.2
Storage Temperature (°C)		-40	-	80
Environmental Humidity (RH, %)		5	-	85
Lifetime (hours) (MTTF at 25°C)		20,000	-	-
RoHS Compliance Declaration		Yes		

(1) Full Angle ($1/e^2$)

(2) at Output Window

(3) Full Angle

(4) at 25 +/- 2°C

(5) to 75% of full Output Power