



FRPM-642-20

Key Features:

Mini Size
 High Reliability
 High Stability
 High Polarization Extinction Ratio

Applications:

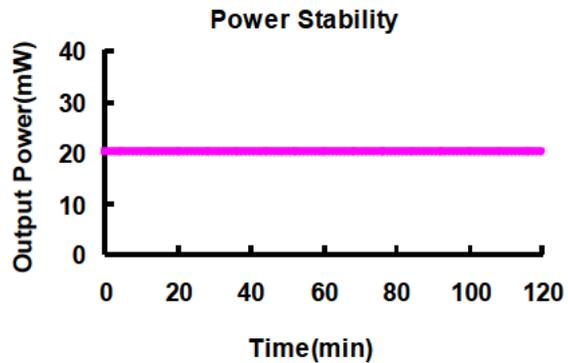
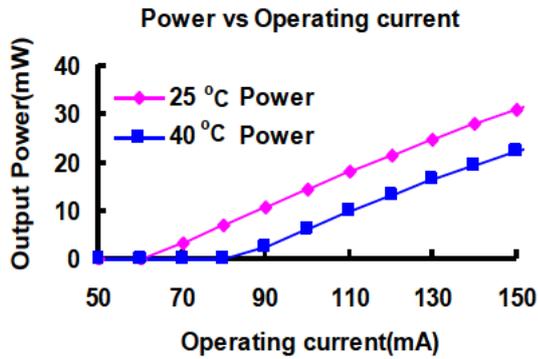
Laser Pointer
 Laser Display
 Test and Measurement Source
 Survey Equipments

Model Number	FRPM-642-20			
Optical Parameters	Specs			Conditions
	Min	Typ	Max	
Wavelength	635nm	642nm	645nm	
Output Power	18mW	20mW ^①	25mW	At 25 °C
Power Stability (2hours @ Constant Temp)	+/-0.5%	+/-1%	+/-2.5%	
Operating Temperature (Case)	-	-	-10~+40 °C	APC
M-Square	-	-	1.1	
Polarization Extinction Ratio	13dB	15dB	-	At 25 °C
Fiber Coupling Efficiency	40%	50%	55%	
Electrical Parameters				
LD Working Current	-	122 mA ^②	155mA	
LD Working Voltage	-	2.5V	2.7V	
Laser Operating Mode	-	APC	-	
Fiber Parameters				
Fiber Type	-	4.5/125µm PM Fiber	-	
Fiber Numerical Aperture	-	0.13	-	
Mechanical Parameters				
Laser Head Dimensions	Length	-	28.35mm	-
	Diameter	-	8mm	-
Reliability				
Operating Humidity	-	5%~85% R.H.	-	
Storage Temperature	-	-40 to +85 °C	-	
Shock	150m/s ² , 6ms, semisinusoidal, 4000 shocks, z-axis 75m/s ² , 6ms, semisinusoidal, 1000 shocks, x,y-axis			
Vibration	Amplitude = ±0.75mm, 10 Hz to 57 Hz sinusoidal, 20 cycles per axis Acceleration 1g, 57 to 500 Hz sinusoidal, Sweep Rate 1 Oct/min			
Expected Lifetime (MTTF)	10000hrs	-	-	Room temperature

Note: ^① 10~20mW is optional

^② 20mW at 25 °C

Typical Output Performance



FRPM-642-20-LL-JJ-TT

LL: Fiber Length	05=0.5M
	10=1M
	00= To be Customized
JJ: Fiber Jacket (diameter)	01= 900μm buffer
	02=2.8mm PVC Jacket
	00= To be Customized
TT: Fiber Termination	01=No Connector
	02= FC/APC Connector
	03= FC/PC Connector
	00= To be Customized

Dimensions and Pin Configuration (Unit: mm)

