

5W Xenon Flash Lamp Module - XFM050 Series

This 5W Xenon flash lamp module contains Xenon flash lamp, trigger socket and control power supply in a compact body. It can be easily fit into analytical instruments as a highly stable light source.

- Stability of light output is max 2.0% CV and good for analytical instruments.
- Guaranteed lifetime is 1 billion flashes.
- Broad radiant spectrum from UV to IR.
- Low calorific value allowing continuous operation with silence, 50dB or less.
- Head-on type and SMA (Fiber cable connector) type is also available.
- Noise control filter built in the product.



Specifications

Parameter		Requirement (at ambient temp 23°C ± 5°C and body temp 50°C or less)
Output	Window material / Spectral range	UV glass / 185 ~ 2000 nm
	Main discharge voltage variable range	400 ~ 600 V / changeable with outside signal 3.2 ~ 4.8 V
	Main discharge capacitor	0.047 / 0.11 / 0.22 / 0.28 μF
	Max average input	5W (continuous) "P[W] = C[F] × (V[Volts]) ² × f[Hz] / 2"
	Guaranteed lifetime / Arc size	1 billion flashes / 1.5 mm
	Stability	Max 2.0% CV "Stability(%)=(Light output standard deviation/aver light output × 100"
Input	Voltage (DC)	Min 11 V ~ Max 28 V
	Input current (Average value) ^{※1}	at 12 V : 0.7 A, at 24 V : 0.4 A
	Input current (Peak value) ^{※1}	at 12 V : 2.0 A, at 24 V : 1.8 A
	Inrush current (Peak value) ^{※1}	at 12 V : 2.0 A, at 24 V : 1.8 A
	Trigger input	4.5 V ~ 5.5 V, pulse width 10 μsec or more
	Trigger polarity/Trigger input impedance	Rising edge of trigger signal / 330 Ω
Cooling method	Natural cooling (Cooling is required when the body temp. goes up to 50°C or more)	
Operating ambient temp. / Storage temp	0 ~ 40 °C (Humidity 85 %RH or less) / -40 ~ 90 °C (Humidity 95 %RH or less)	
CE Marking	EMC Standard IEC 61326-1 Class A / RoHS Directive EN IEC 63000:2018	
Resistance to Vibration / Shock	10 ~ 55 Hz, 19.6 m/s ² / 196.1 m/s ² max	

※1 Operating conditions ... Main discharge capacitor : 0.11 μF, Main discharge voltage : 600 V, Emission frequency : 252 Hz

Model number guide

XFM050-□□□

└─ 0 ... 0.047 μF, 1 ... 0.11 μF, 2 ... 0.22 μF, 3 ... 0.28 μF

└─ 0 ... Vertical, 1 ... Horizontal

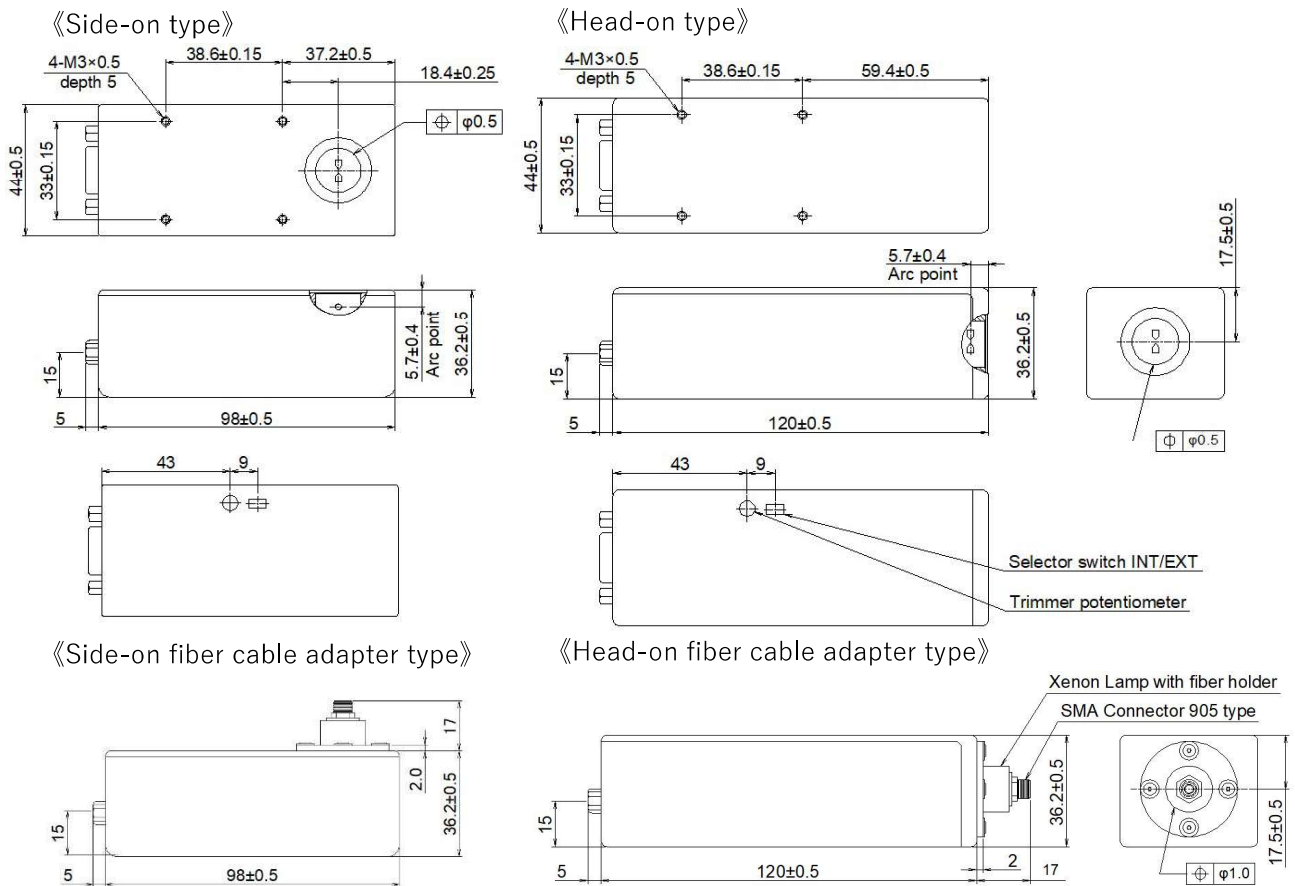
└─ 0 ... Side-on type, 1 ... Head-on type

2 ... Side-on fiber cable adapter type, 3 ... Head-on fiber cable adapter type

Max. repetitive emission frequency (Hz) by model number

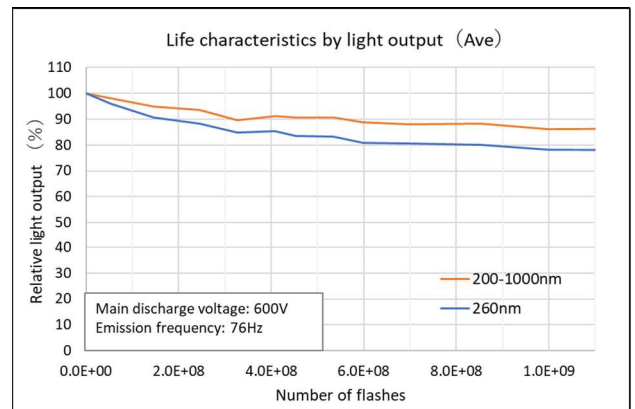
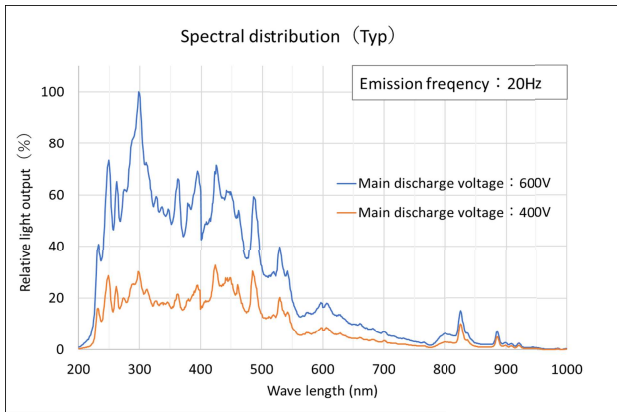
Model No.	Main discharge capacitor (μF)	Main discharge voltage (V)	Max. repetitive emission frequency(Hz)/Max. average lamp input (W)
			Input 11 ~ 28 V
XFM050-□□0	0.047	400	530 / 2.0
		500	530 / 3.1
		600	530 / 4.5
XFM050-□□1	0.11	400	530 / 4.7
		500	382 / 5.0
		600	252 / 5.0
XFM050-□□2	0.22	400	284 / 5.0
		500	182 / 5.0
		600	126 / 5.0
XFM050-□□3	0.28	400	223 / 5.0
		500	143 / 5.0
		600	100 / 5.0

External dimensions

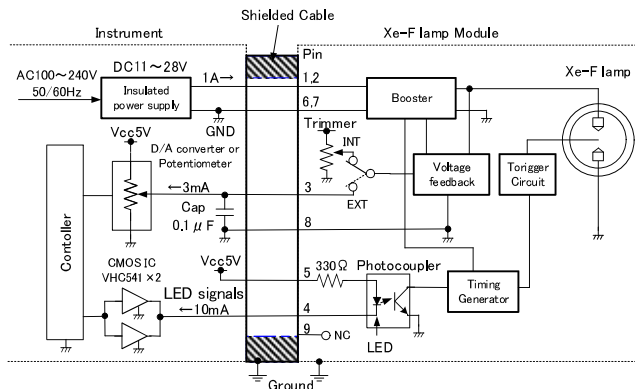


Characteristics

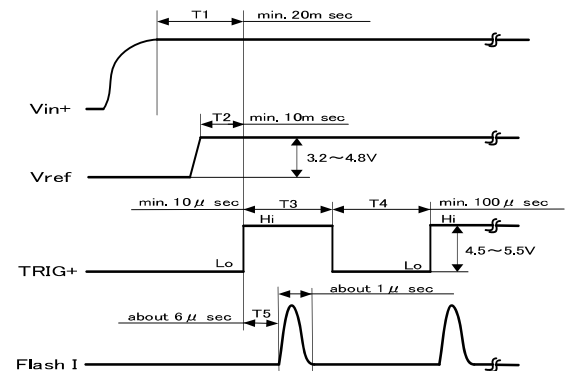
Operating conditions ... Test instrument : Spectrophotometer, Main discharge capacitor : 0.11 μ F, Half width : 5nm



Connection with instrument



Interface between module and instrument



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