

1x0 High Power SHG Mixer



Preliminary

- Plug & play
- Singe-pass & high-efficiency
- Compact & robust

Reference Specification sheet

Optics (General)	unit	Specification			Note
Mixer Type		Second Harmonic Generation (SHG)			
Mixer Pigtailing Type	ıxo				
Input Wavelength	nm	nm 1064			
Output Wavelength	nm	532			
Input Fiber, Connector		FUD3460, None			
Output Fiber, Connector		None			
Specified pump power	W	25			
Pump condition		CW, multimode mode, <0.1nm linewidth			[1]
Optics (output)	unit	Minimum	Typical	Maximum	Note
Output power @ specified pump	W	5	5.2		
Beam quality, M ²			1,1	1.2	[2]
Diameter of collimated output beam	mm	0.9	1	1.1	[2]
Waist location (from the output window)	mm	-300	0	300	[2]
Output beam (TEMoo) ellipicity	%		5	10	[2]
Residual IR/output power rejection ratio	dB	40	45		
Output polarization state	linear @ vertical axis				
Output PER	dB	20	25		
Back reflection of IR wavelength	dB		-45	-42	
Output beam height	mm	18.4	18.9	19.4	
Output beam angle	mrad	-7.5	0	7.5	
Mechanics	unit		Specification		Note
Housing dimension (L*W*H)	mm	170x96x43			[3]
Electrics	unit	Minimum	Typical	Maximum	Note
Electrical connector		Hiroshi HR 10G-10P(73)			
Thermoelectric cooler		3.2V, 4A maximum, Qc = 6.9 W			
NTC Thermistor resistance@25°C	kΩ	10			
Thermistor B vale (B25/85)	K	3478			
PD response	V/W	0.36	0.4	0.44	
PD response linearity	%		2	5	[4]
Environment	unit	Minimum	Typical	Maximum	Note
Storage temperature (no humidity)	°C	-20	-	70	
Operating temperature range	°C	10	25	35	
Operating relative humidity (non condensing)	%RH	0	-	85	
Vibration / Shock		Refer to ISTA-2A			
Restriction of hazardous substances directive (RoHs)	Declaration of Conformity to 2011/65/EG				

- [1] Efficiency will be different for single longitudinal mode pump
- [3] Defined at the target output power
 [3] Including external heatsink, mixer itself is 150x50x35 mm3
- [4] Defined by the range from 20% to full power



1xo High Power SHG Mixer

- Mechanical drawing

