

Quartz Crystal Wave Plate

X9BS / X9BD series
Single plate / Double plate



Quartz wave plate is the optical component that makes retardation, caused by birefringence, between n_o and n_e .

Applications

- Semiconductor Lithography system
- High Precision laser system
- Microscope, other

Murata's strength

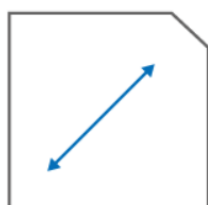
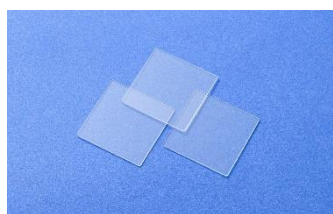
- High quality synthetic quartz in house
- Durability for high power laser beam
- Correspondence of irregular shape
- Short lead time

Series	Type
X9BSQ X9BSH X9BSR	Single plate
X9BDQ X9BDH X9BDR	Double plate

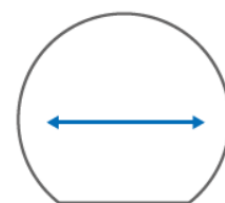
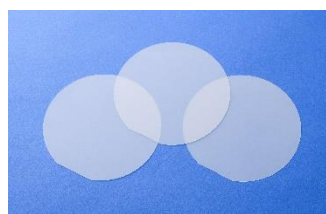
Specifications

	HWP(1/2 wave plate)		QWP(1/4 wave plate)	
	Single	Double	Single	Double
Retardation	180° ± 5° (@ Design wavelength)		90° ± 5° (@ Design wavelength)	
Wavelength*1	193 to 930nm		193 to 930nm	
Outer Appearance and Dimension	Φ10 to φ50mm, □5 to 50mm		Φ10 to φ50mm, □5 to 50mm	
Thickness	0.1 to 2.0mm	0.22 to 2.0mm	0.1 to 2.0mm	0.22 to 2.0mm
Wave front aberration (@ Measurement wavelength = 632.8nm)	≤ 1/4λ(P-V)	≤ 2λ(P-V)	≤ 1/4λ(P-V)	≤ 2λ(P-V)
Transmittance	≥ 99% (@ Design wavelength)		≥ 98%(@ Design wavelength)	
Coating	Anti Refraction coating		Anti Refraction coating	

*1:We may be discussed separately for coating conditions.



Optical axis 0°



Optical axis 45°

※ Please contact Murata when more detailed information needed.

