

Coaxial Attenuators

- Frequency up to 67 GHz, maximum input power up to 50 W
- Broad bandwidth, low SWR, high attenuation accuracy
- Maximum attenuation up to 115 dB, minimum step size is 1 dB



● Coaxial Fixed Attenuators Specifications

Model	Description	Attenuation (dB)	Attenuation Accuracy (dB)	Frequency Range (GHz)	SWR(Max.)	Input Power (W)(Max.)	Connector Type	
81550A	fixed attenuator	6	±2.0	DC~67	2.0	1	1.85 mm	
81550B	fixed attenuator	10						
81503HA	fixed attenuator	1	±1	DC~50	1.4	1	2.4 mm	
81503HB	fixed attenuator	2						
81503HC	fixed attenuator	3						
81503	fixed attenuator	3	±1.5	DC~40	1.4	1	2.4 mm	
71515	fixed attenuator	6						
71515A	fixed attenuator	10						
71515B	fixed attenuator	20						
71515C	fixed attenuator	30						
81503FA	fixed attenuator	1	±1	DC~40	1.35	1	2.92 mm	
81503FB	fixed attenuator	2						
81503FC	fixed attenuator	3			±1.2			1.4
81503FD	fixed attenuator	6			±1.5			
81503EA	fixed attenuator	1	±0.5	DC~26.5	1.25	2	3.5 mm	
81503EB	fixed attenuator	2						
71514	fixed attenuator	3	±1.4					
81503EE	fixed attenuator	5						
71514A	fixed attenuator	6						
71514B	fixed attenuator	10						
71514C	fixed attenuator	20						
71514D	fixed attenuator	30						
71514E	fixed attenuator	40						±1.6

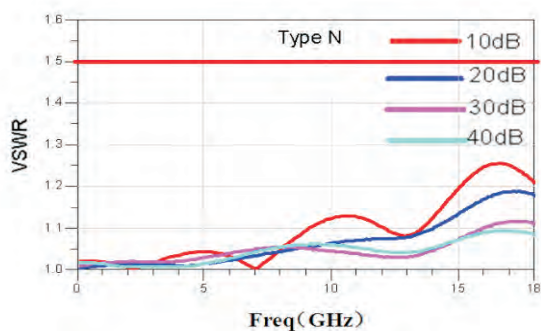
Model	Description	Attenuation (dB)	Attenuation Accuracy (dB)	Frequency Range (GHz)	SWR(Max.)	Input Power (W)(Max.)	Connector Type
81503DE	fixed attenuator	5	± 1	DC~18	1.5	2	Type-N
71513	fixed attenuator	10	± 0.8				
71513A	fixed attenuator	20	± 1.0				
71513B	fixed attenuator	30	± 1.0				
71513C	fixed attenuator	40	± 1.5				
71512	fixed attenuator	10	± 0.6	DC~12.4	1.3	2	Type-N
71512A	fixed attenuator	20	± 0.6				
71512B	fixed attenuator	30	± 0.8				
71512C	fixed attenuator	40	± 1.2				
71522B	fixed attenuator	20	± 1.5	DC~18	1.3	25	Type-N
71522C	fixed attenuator	30	± 1.6				
71522D	fixed attenuator	40	± 1.7				
71523A	fixed attenuator	20	± 1.6	DC~18	1.35	50	Type-N
71523B	fixed attenuator	30	± 1.7				
71523C	fixed attenuator	40	± 1.8				

● Programmable Step Attenuators Specifications

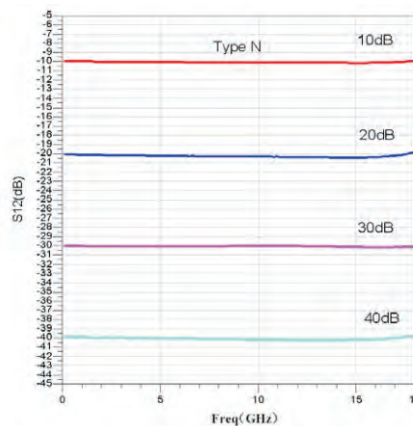
Model	Description	Frequency Range (GHz)	Attenuation Range (dB)	Step Size (dB)	Insertion Loss at 0 dB (dB)(Max.)	SWR (Max.)	RF Power (W) (Max.)	Repeatability (dB) (Max.)	Connector Type
81504	programmable step attenuator	DC~40	0~115	5	5.0	2.0	1	0.05	2.4 mm
81505	programmable step attenuator	DC~50	0~10	2	3.5	2.0	1	0.05	2.4 mm
81506	programmable step attenuator	DC~40	0~90	10	4.1	2.0	1	0.05	2.4 mm
81507	programmable step attenuator	DC~40	0~60	10	3.5	1.8	1	0.05	2.4 mm
81508	programmable step attenuator	DC~50	0~60	10	3.5	1.9	1	0.05	2.4 mm
81510	programmable step attenuator	DC~26.5	0~11	1	2.5	2.0	1	0.05	3.5 mm
81510F	programmable step attenuator	DC~40	0~11	1	4.1	2.0	1	0.05	2.4 mm
81511	programmable step attenuator	DC~40	0~70	10	3.5	1.8	1	0.05	2.4 mm
81512	programmable step attenuator	DC~40	0~35	5	3.5	1.8	1	0.05	2.4 mm

Model	Description	Frequency Range (GHz)	Attenuation Range (dB)	Step Size (dB)	Insertion Loss at 0 dB (dB)(Max.)	SWR (Max.)	RF Power (W) (Max.)	Repeatability (dB) (Max.)	Connector Type
81512A	programmable step attenuator	DC~50	0~35	5	3.5	1.9	1	0.05	2.4 mm
81514	programmable step attenuator	DC~40	0~75	5	4.1	2.0	1	0.05	2.4 mm
81515	programmable step attenuator	DC~40	0~110	10	4.1	2.0	1	0.05	2.4 mm
81516	programmable step attenuator	DC~26.5	0~70	10	3.5	1.8	1	0.05	3.5 mm
81517	programmable step attenuator	DC~26.5	0~75	5	3.5	2.0	1	0.05	3.5 mm
81518	programmable step attenuator	DC~26.5	0~110	10	3.5	2.0	1	0.05	3.5 mm
81519	programmable step attenuator	DC~26.5	0~35	5	3.5	1.8	1	0.05	3.5 mm

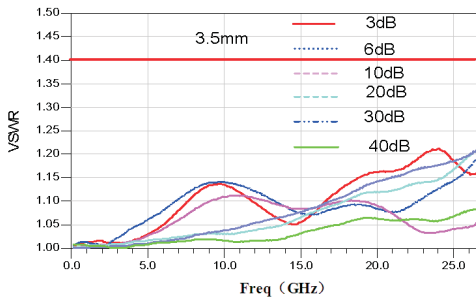
● Fixed Attenuator Typical Testing Curve



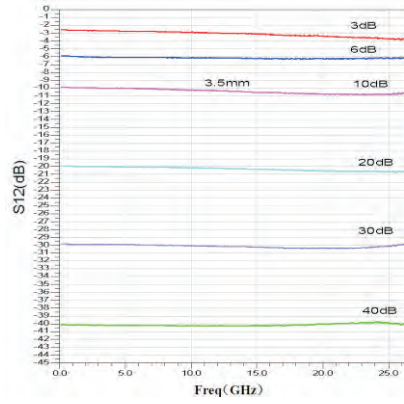
Type-N series fixed attenuators port SWR (typical)



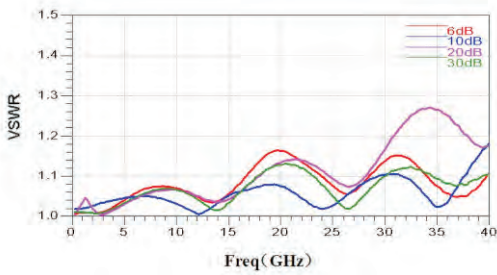
Type-N series fixed attenuators attenuation accuracy (typical)



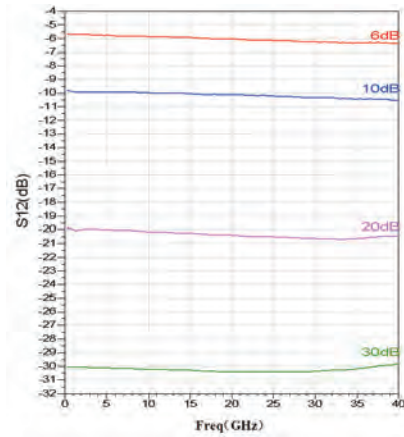
3.5 mm series fixed attenuators port SWR (typical)



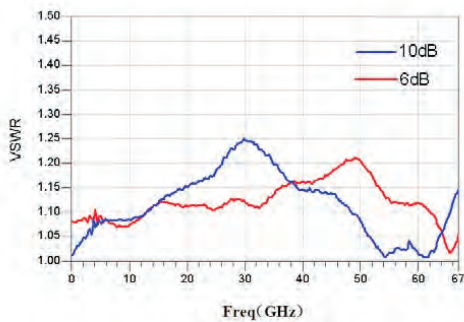
3.5 mm series fixed attenuators attenuation frequency response (typical)



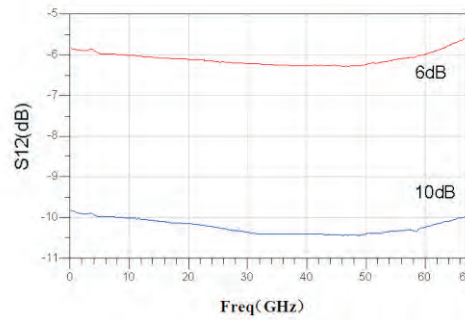
2.4 mm series fixed attenuators port SWR (typical)



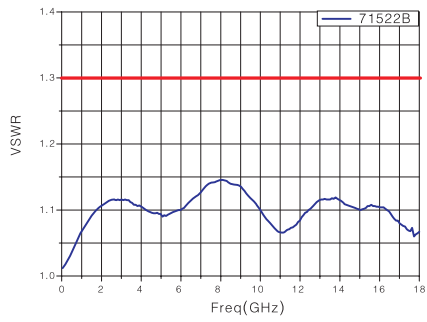
2.4 mm series fixed attenuators attenuation accuracy (typical)



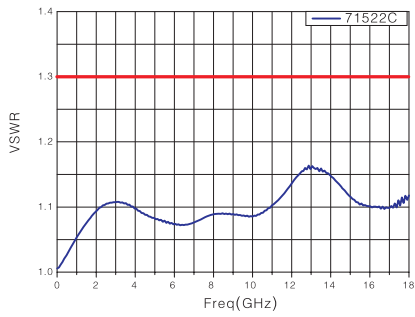
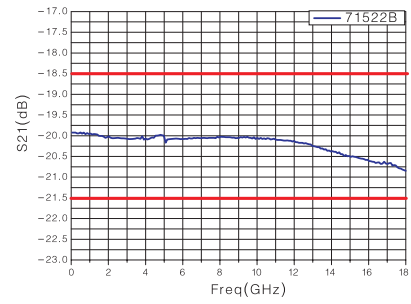
1.85 mm series fixed attenuators port SWR (typical)



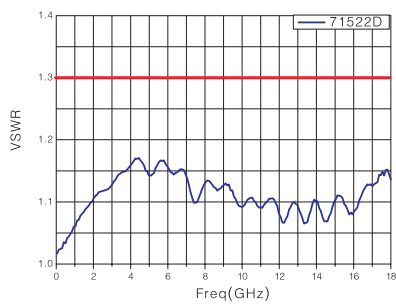
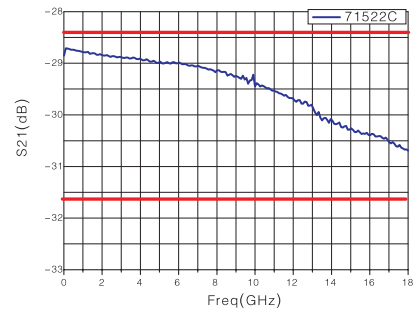
1.85 mm series fixed attenuators attenuation accuracy (typical)



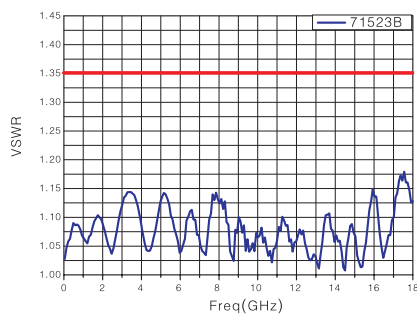
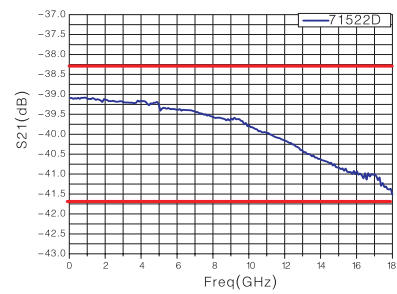
25 W 20 dB attenuator testing curve (71522B)



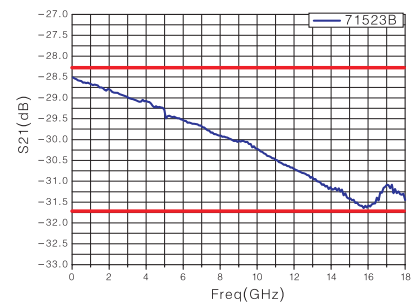
25 W 30 dB attenuator testing curve (71522C)

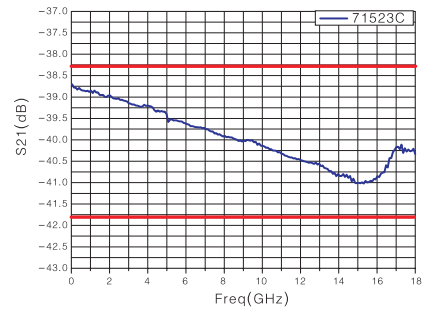
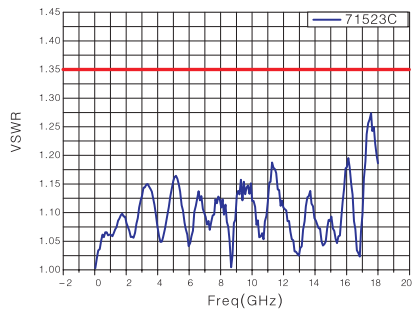


25 W 40 dB attenuator testing curve (71522D)



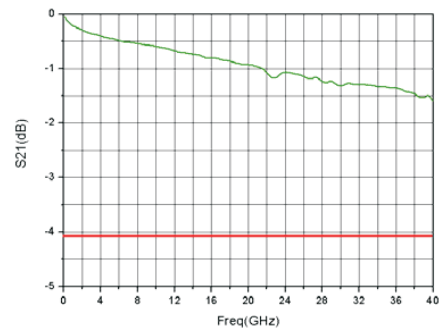
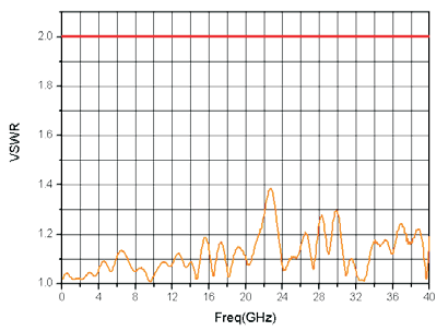
50 W 30 dB attenuator testing curve (71523B)



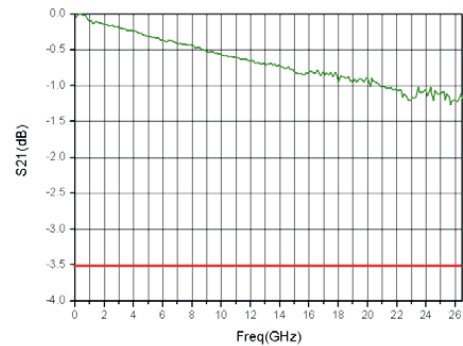
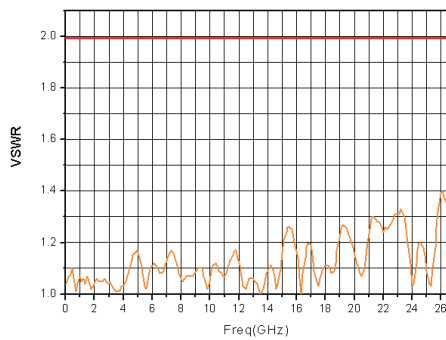


50 W 40 dB attenuator testing curve (71523C)

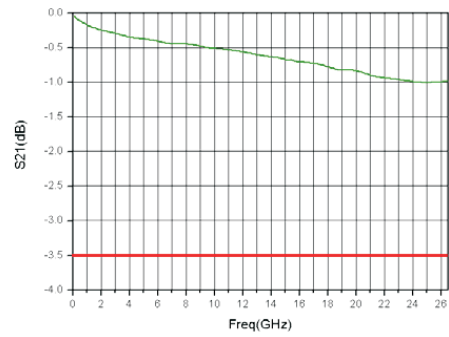
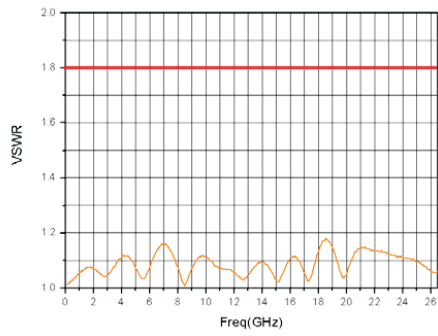
○ Programmable Step Attenuators Typical Testing Curve



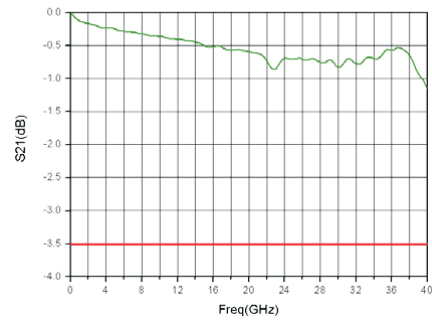
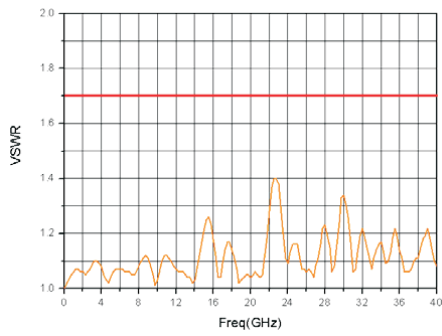
81506/81510F/81514/81515 SWR & insertion loss vs. frequency @0dB



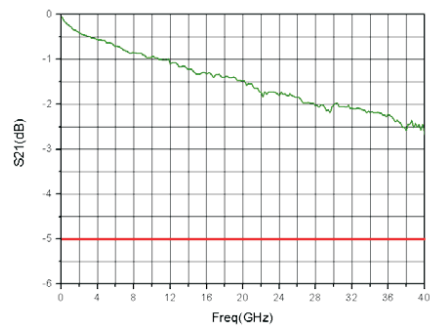
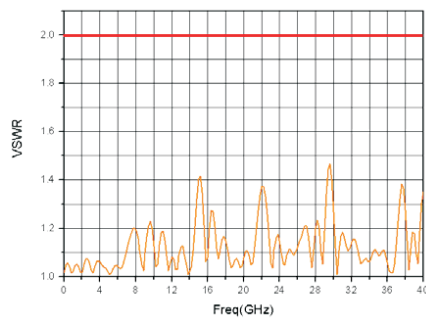
81510/81517/81518 SWR & insertion loss vs. frequency @0dB



81516/81519 SWR & insertion loss vs. frequency @0dB



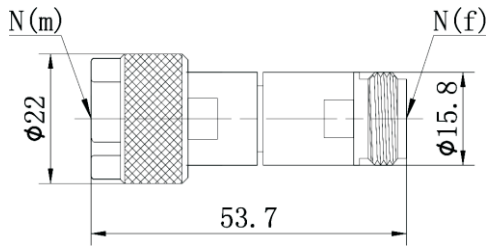
81507/81511/81512 SWR & insertion loss vs. frequency @0dB



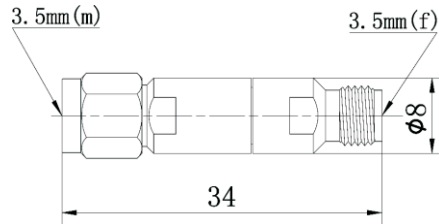
81504 SWR & insertion loss vs. frequency @0dB

• Dimensions

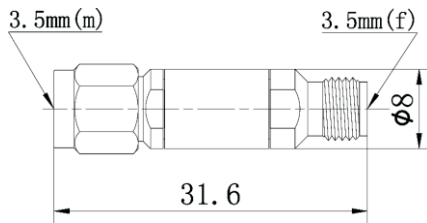
71512/71512A/71512B/71512C/
71513/71513A/71513B/71513C



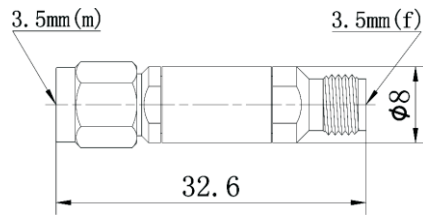
71514/71514A/71514B



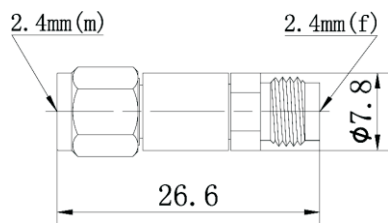
71514C/71514D



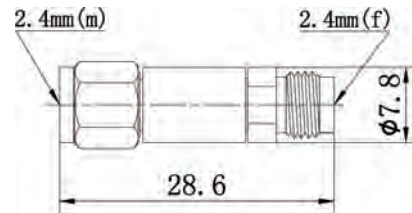
71514E



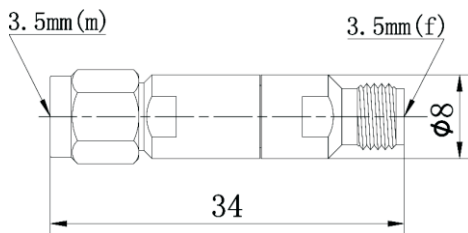
71515/71515A/71515B



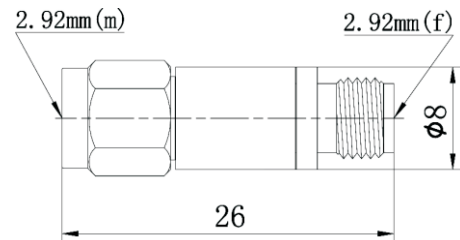
71515C



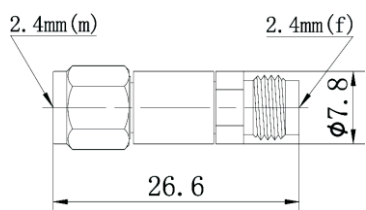
81503EA/81503EB/81503EE



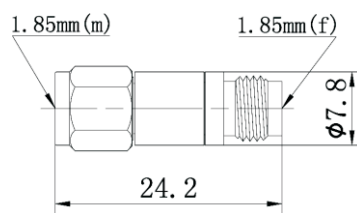
81503FA/81503FB/81503FC



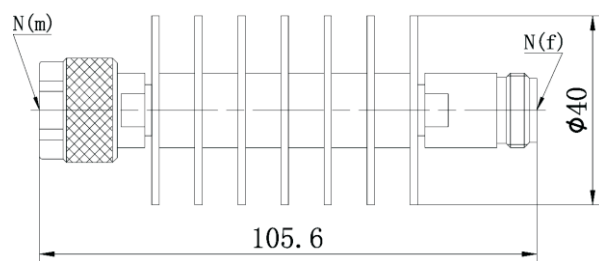
81503/81503HA/81503HB/81503HC



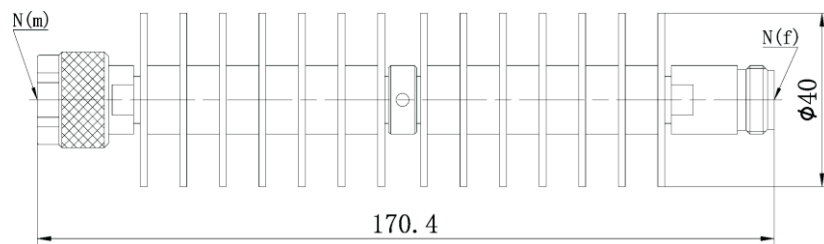
81550A/81550B



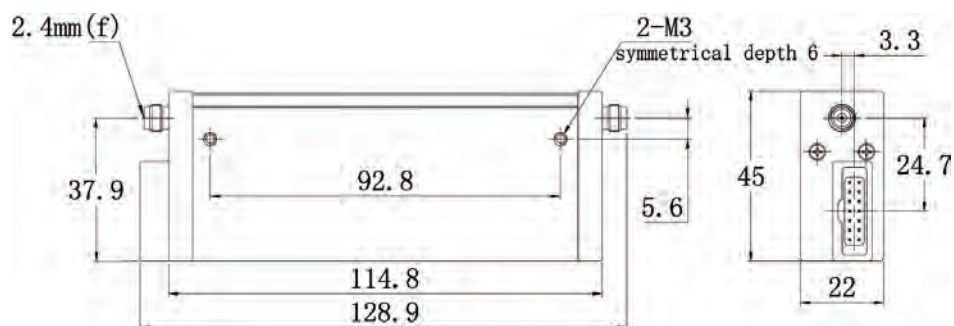
71522B/71522C/71522D



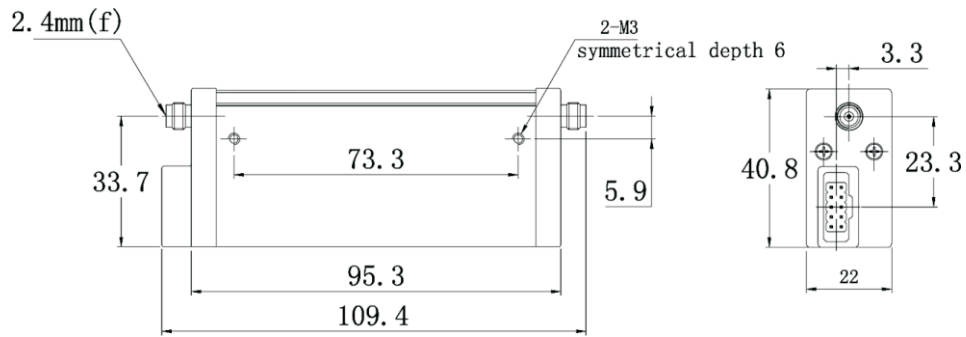
71523A/71523B/71523C



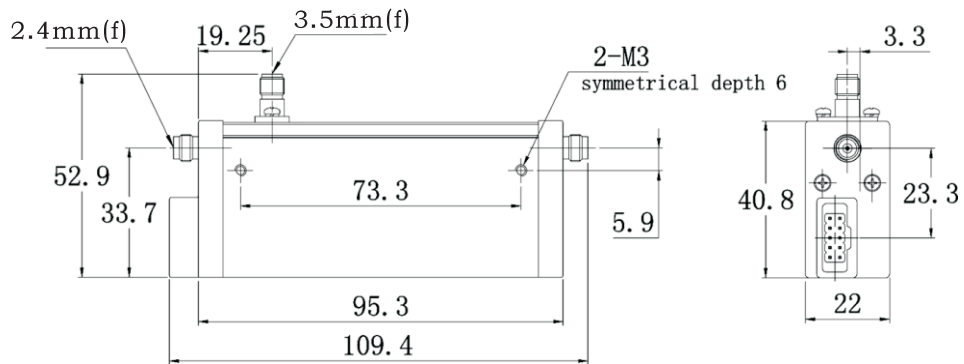
81504



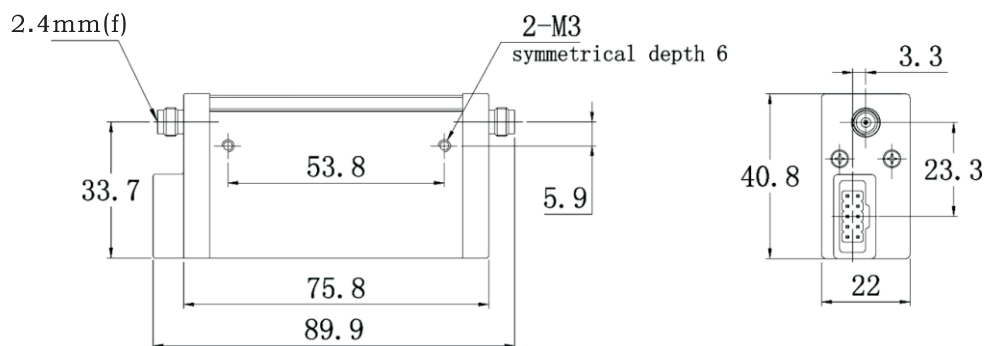
81506/81510F/81514/81515



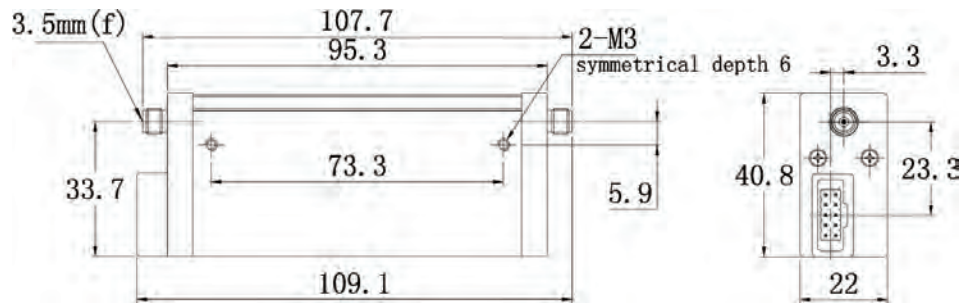
81505



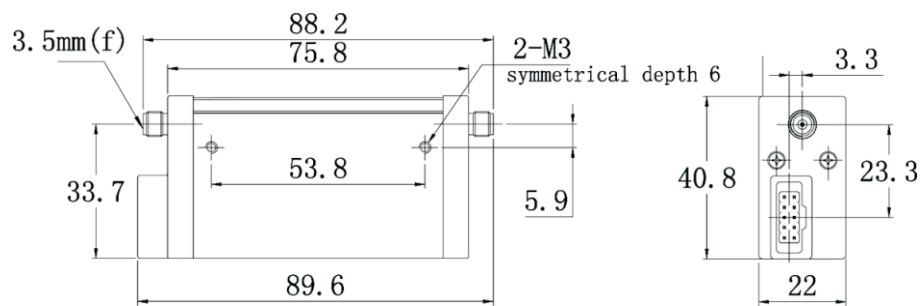
81507/81508/81511/81512/81512A



81510/81517/81518



81516/81519



Notes: All dimensions are in millimeter.

Product specifications and descriptions in this document are subject to change without notice.