

# IPA ACS Waveform Data Sheet

Item	Insertion Loss (dB)						Return Loss (dB)						
	Thickness of ACS (mm)		0.15	0.2	0.25	0.3	0.5	0.8	0.15	0.2	0.25	0.3	0.5
Frequency (GHz)	0.15	0.2	0.25	0.3	0.5	0.8	0.15	0.2	0.25	0.3	0.5	0.8	
5	0.09	0.1	0.35	0.16	0.29	-0.02	-43.19	-32.37	-31.55	-42.93	-17.23	-10.92	
10	0.12	0.15	0.24	0.22	-0.14	-1.05	-32.57	-26.16	-25.19	-48.23	-12.04	-5.73	
15	0.06	0.09	0.1	0.14	-0.56	-2.23	-28.97	-21.5	-21.11	-37.02	-9.93	-4.86	
20	-0.01	0.02	0.01	0.08	-0.71	-9.45	-22.16	-23.6	-23.88	-27.83	-11.62	-1.63	
25	-0.05	-0.11	-0.14	0.04	-1.36	-5.43	-23.04	-17.66	-17.53	-25.1	-8.69	-7.16	
30	-0.11	-0.16	-0.28	-0.03	-1.72	-7.24	-21.97	-20.35	-21.23	-29.11	-9.96	-5.25	
35	-0.24	-0.29	-0.37	-0.19	-3.39	-12.81	-20.42	-14.14	-14.77	-23.18	-9.21	-7.73	
40	-0.44	-0.29	-0.35	-0.49	-4.49	-20.06	-15.04	-40.46	-35.14	-19.94	-10.96	-4.65	
45	-0.58	-0.62	-0.67	-0.58	-9.96	-22.28	-18.4	-12.04	-13.41	-15.98	-10.81	-8.02	
50	-0.64	-0.73	-0.9	-0.8	-11.33	-36.19	-18.46	-15.49	-12.88	-12.25	-14.18	-11.15	
55	-0.95	-0.96	-1.17	-1.21	-11.98	-26.88	-16.04	-14.41	-22.51	-30.41	-8.72	-10.92	

Model of measuring instrument : N5227B (US63055379)+AFR

## Photos of the instrument



## PCBA & Cable



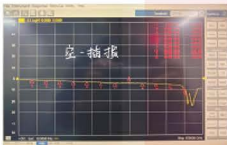
## PCBA



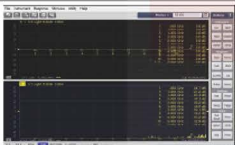
## PCBA & ACS



## AFR Before



## AFR After



## Waveform diagram

### Thickness of ACS (mm)

### Waveform diagram of loss

0.15



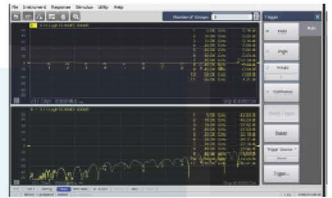
0.2



0.25



0.3



0.5



0.8

