

# AEROTECH C3.4

## CERTIFIED VALUES

Total Impulse: **8.96 newton-seconds**  
Delays: **Plugged**  
Propellant Type: **Composite**  
Propellant Mass: **5.2 grams**  
Casing Dimensions: **18 mm X 72 mm**

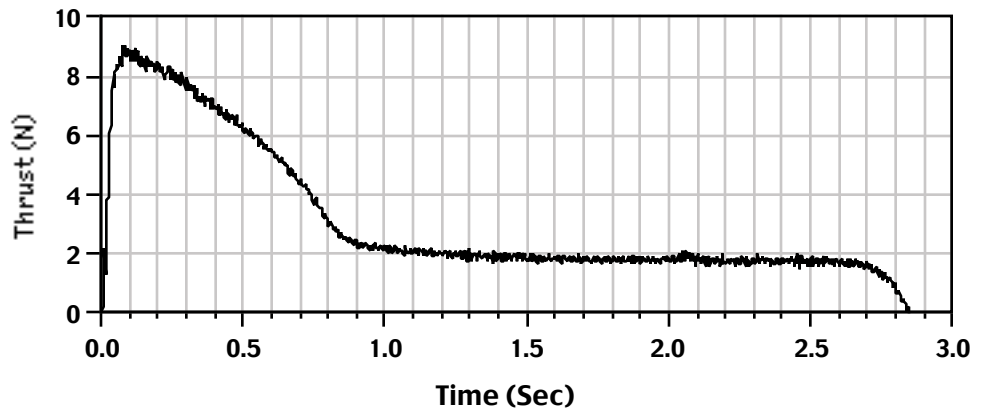
Certification Type: **Model Rocket**

## STATIC TEST DATA

Date Tested: **7-July-2013**  
Total Impulse: **8.96 newton-seconds ( 0.16 )**  
Peak Thrust: **9.08 newtons ( 0.63 )**  
Burn Time: **2.86 seconds ( 0.11 )**  
Average Thrust: **3.14 newtons**  
Mass After Firing: **17.4 grams**

Delay Time	Average Measured Delay	Initial Mass
PT	0.00	23.9 g

## TYPICAL THRUST-TIME CURVE



## REMARKS

MOTOR NO.	ENGINE TYPE	TOTAL IMPULSE	MAX THRUST	AVG THRUST	BURN TIME
2	C3.4-PT	8.95	8.53	3.01	2.97
3	C3.4-PT	8.97	9.22	3.18	2.82
4	C3.4-PT	9.08	8.65	3.22	2.82
5	C3.4-PT	9.10	8.73	3.32	2.74
6	C3.4-PT	8.98	8.86	3.06	2.94
7	C3.4-PT	8.77	9.30	3.29	2.66
8	C3.4-PT	9.18	10.48	3.18	2.88
10	C3.4-PT	8.77	9.13	2.93	3.00
11	C3.4-PT	9.09	8.30	3.30	2.76
12	C3.4-PT	8.68	9.56	2.93	2.96
	AVG	8.96	9.08	3.14	2.86
	STD	0.16	0.59	0.14	0.11
	STD %	1.76	6.54	4.52	3.74

; Aerotech C3.4-PT RASP.ENG file made from NAR published data  
; File produced, 2013  
; The total impulse, peak thrust, average thrust and burn time are  
; the same as the averaged static test data on the NAR web site in  
; the certification file. The curve drawn with these data points is as  
; close to the certification curve as can be with such a limited  
; number of points (32) allowed with wRASP up to v1.6.

C3.4 18 72 0, .0052 .0239 A

0.023	3.188
0.028	5.669
0.093	9.080
0.235	8.208
0.427	6.881
0.513	6.188
0.600	5.438
0.666	4.803
0.762	3.649
0.838	2.668
0.970	2.149
1.228	1.918
1.522	1.918
1.800	1.860
2.013	1.745
2.068	2.034
2.134	1.803
2.326	1.803
2.509	1.745
2.645	1.687
2.721	1.457
2.807	0.879
2.860	0.000

