

APOGEE C10

CERTIFIED VALUES

Total Impulse: 10.0 newton-seconds
Delays: 4, 7, 10 seconds

Propellant Type: Composite
Propellant Mass: 4.9 grams

Casing Dimensions: 18 mm × 50 mm

Certification Date: 91-February-10
Contest Use Date: 91-May-11

Certification Type: Model Rocket

STATIC TEST DATA

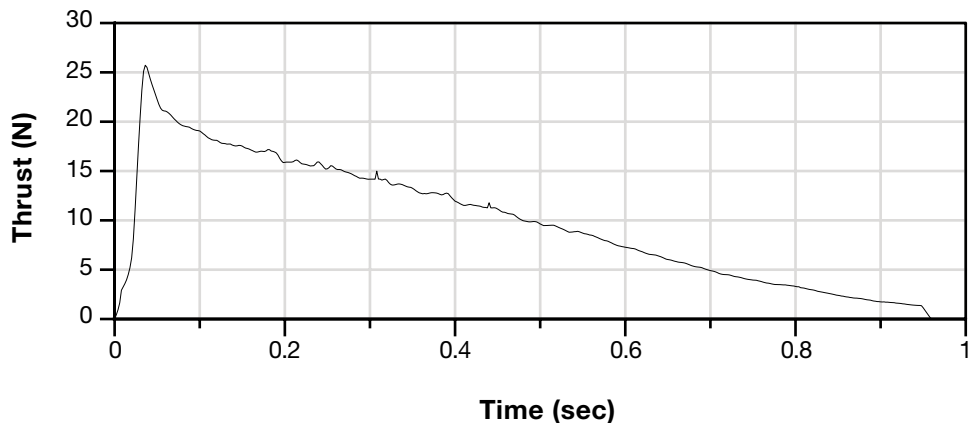
Date Tested: 91-February-9

Total Impulse: 9.56 newton-seconds (σ 0.46)
Peak Thrust: 25.72 newtons (σ 2.20)
Burn Time: 0.96 seconds (σ 0.07)
Average Thrust: 9.96 newtons

Mass After Firing: 8.1 grams

Delay Time	Average Measured Delay	Initial Mass	Mfg Recommended Max Liftoff Weight
4	3.95	17.6 g	225 g
7	6.93	17.6 g	115 g
10	9.69	17.7 g	30 g

TYPICAL THRUST-TIME CURVE



REMARKS

; Apogee C10 RASP.ENG file made from NAR published data
; File produced September 4, 2000
; 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.

C10	18	50	4-7-10	.0049	.0176	APO
0.010	2.712					
0.019	5.842					
0.029	17.116					
0.037	25.720					
0.051	22.535					
0.070	20.446					
0.106	18.983					
0.164	17.085					
0.188	17.085					
0.200	15.824					
0.216	16.036					
0.255	15.602					
0.293	14.350					
0.343	13.503					
0.394	12.655					
0.410	11.605					
0.434	11.605					
0.521	9.287					
0.631	6.340					
0.741	4.021					
0.851	2.119					
0.911	1.480					
0.945	1.264					
0.960	0.000					

