

QUEST D5

CERTIFIED VALUES

Total Impulse: 19.61 newton-seconds
Delays: Plugged

Propellant Type: Black Powder
Propellant Mass: 25.0 grams

Casing Dimensions: 20 mm × 88 mm

Certification Date: 07-August-12

Certification Type: Model Rocket

STATIC TEST DATA

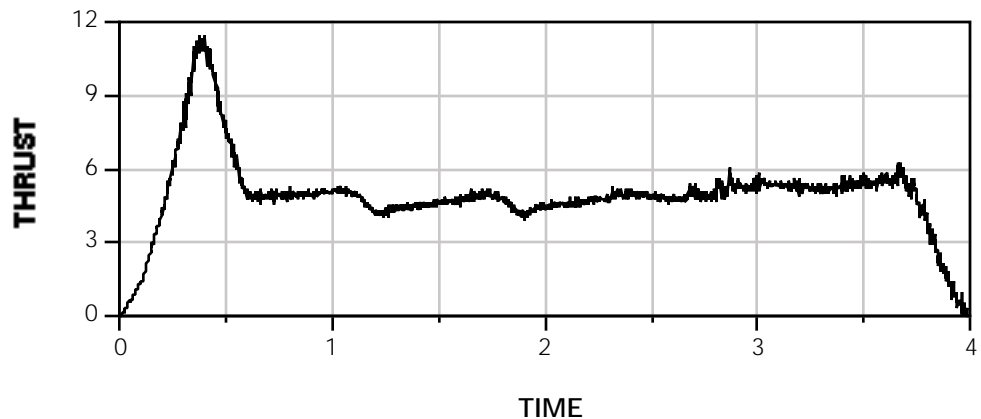
Date Tested: 07-August-11

Total Impulse: 19.61 newton-seconds (0.23)
Peak Thrust: 11.49 newtons (0.54)
Burn Time: 3.98 seconds (0.08)
Average Thrust: 4.93 newtons

Mass After Firing: 13.3 grams

Delay Time	Average Measured Delay	Initial Mass	Mfg Recommended Max Liftoff Weight
P	None	38.4 g	

TYPICAL THRUST-TIME CURVE



REMARKS


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; Quest D5-P RASP.ENG file made from NAR published data
; File produced Aug 30, 2008
; 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.

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D5-P 20 70 P .0250 .0384 Q
0.086 1.272
0.189 4.112
0.283 7.774
0.369 11.490
0.456 8.800
0.525 6.733
0.595 4.867
0.889 4.873
1.061 5.100
1.200 4.205
1.433 4.509
1.727 5.037
1.882 4.143
2.107 4.521
2.340 5.124
2.617 4.830
2.686 5.279
2.763 4.908
2.789 5.580
2.850 5.207
2.884 5.582
2.953 5.433
3.048 5.510
3.213 5.289
3.377 5.217
3.541 5.519
3.653 5.820
3.731 4.776
3.818 2.910
3.896 1.268
3.980 0.000

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