

AEROTECH G38

CERTIFIED VALUES

Total Impulse: 94 newton-seconds
Delays: 4, 7 seconds

Propellant Type: Composite
Propellant Mass: 55.0 grams

Casing Dimensions: 29 mm × 98 mm

Certification Date: 99-February-22
Contest Use Date: 99-December-31

Certification Type: Model Rocket

STATIC TEST DATA

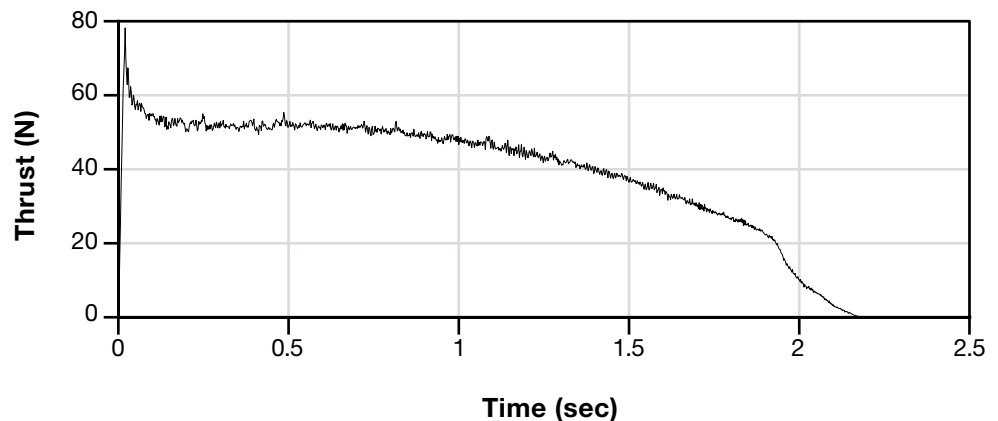
Date Tested: 99-February-21

Total Impulse: 87.68 newton-seconds (σ 0.56)
Peak Thrust: 78.19 newtons (σ 7.44)
Burn Time: 2.18 seconds (σ 0.06)
Average Thrust: 40.22 newtons

Mass After Firing: 34.6 grams

Delay Time	Average Measured Delay	Initial Mass	Mfg Recommended Max Liftoff Weight
4	3.99	106.4 g	
7	6.17	105.9 g	

TYPICAL THRUST-TIME CURVE



REMARKS

; Aerotech G38 RASP.ENG file made from NAR published data
 ; File produced July 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.

```
G38 29 98 4-7 .0550 .1062 A
0.013 66.705
0.018 78.190
0.040 65.480
0.066 56.531
0.163 51.658
0.229 51.658
0.339 51.658
0.423 50.841
0.480 53.282
0.507 51.658
0.560 51.658
0.621 51.658
0.740 50.024
0.899 48.808
0.952 47.592
0.969 48.400
1.048 47.184
1.093 47.991
1.115 45.550
1.242 42.709
1.383 40.677
1.489 37.010
1.590 34.169
1.612 32.535
1.643 32.535
1.828 26.028
1.916 21.962
1.956 15.455
2.013 8.948
2.079 4.474
2.180 0.000
```

