

QUEST A6

CERTIFIED VALUES

Total Impulse: 2.30 newton-seconds
Delays: 4 seconds

Propellant Type: Black Powder
Propellant Mass: 3.5 grams

Casing Dimensions: 18 mm x 70 mm

Certification Date: 07-August-12

Certification Type: Model Rocket

STATIC TEST DATA

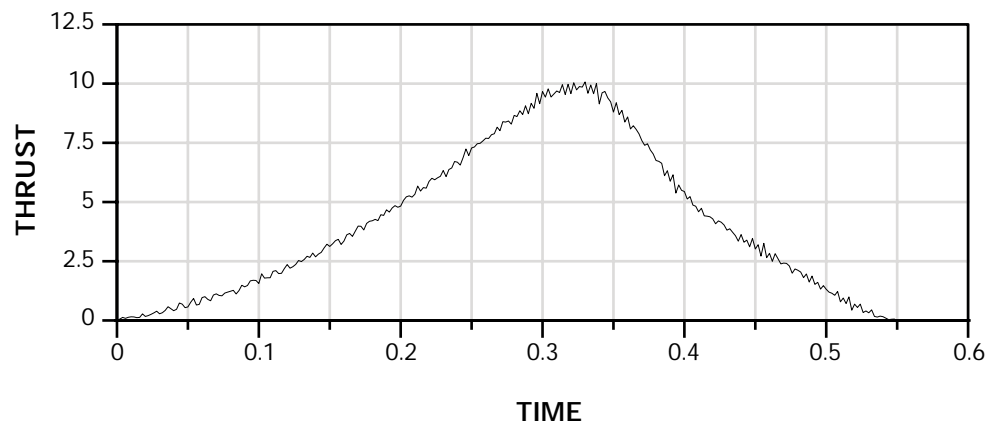
Date Tested: 07-August-11

Total Impulse: 2.30 newton-seconds (σ 0.03)
Peak Thrust: 10.07 newtons (σ 0.14)
Burn Time: 0.55 seconds (σ 0.01)
Average Thrust: 4.15 newtons

Mass After Firing: 8.8 grams

Delay Time	Average Measured Delay	Initial Mass	Mfg Recommended Max Liftoff Weight
4	3.52	15.3 g	

TYPICAL THRUST-TIME CURVE



REMARKS

These motors can be distinguished from previous motors of the same designation by "Made in China" on the label.

Quest A6-4			Fired Aug 11, 2007					
FILE	ENGINE	TOTAL	MAX	AVG	BURN	DELAY	INIT	BURNT
NAME	TYPE	IMPULSE	THRUST	THRUST	TIME	TIME	WT	WT
Q011	A6-4	2.29	10.12	4.08	0.56	3.54	15.1	8.6
Q012	A6-4	2.34	10.37	4.27	0.55	3.47	15.4	9.0
Q013	A6-4	2.30	10.04	4.13	0.56	3.62	15.2	8.8
Q014	A6-4	2.27	10.10	4.14	0.55	3.45	15.3	8.8
Q015	A6-4	2.30	9.85	4.01	0.57	3.40	15.6	9.0
Q016	A6-4	2.29	10.09	4.19	0.55	3.55	15.5	9.0
Q017	A6-4	2.31	9.87	4.17	0.55	3.69	15.5	8.9
Q018	A6-4	2.26	10.04	4.20	0.54	3.66	15.2	8.5
Q019	A6-4	2.32	10.11	4.22	0.55	3.39	15.3	8.9
Q020	A6-4	2.35	10.13	4.14	0.57	3.40	15.1	8.7
	AVG	2.30	10.07	4.16	0.55	3.52	15.32	8.82
	STD	0.03	0.14	0.07	0.01			
	STD %	1.17	1.37	1.71	1.84			
			DELAYS					
ALLOWABLE								
RANGE		INDICATED	AVG	ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL
2.5 TO 5.5		4	3.52	3.54	3.47	3.62	3.45	3.40
				3.55	3.69	3.66	3.39	3.40