

AEROTECH/KBA I301W

CERTIFIED VALUES

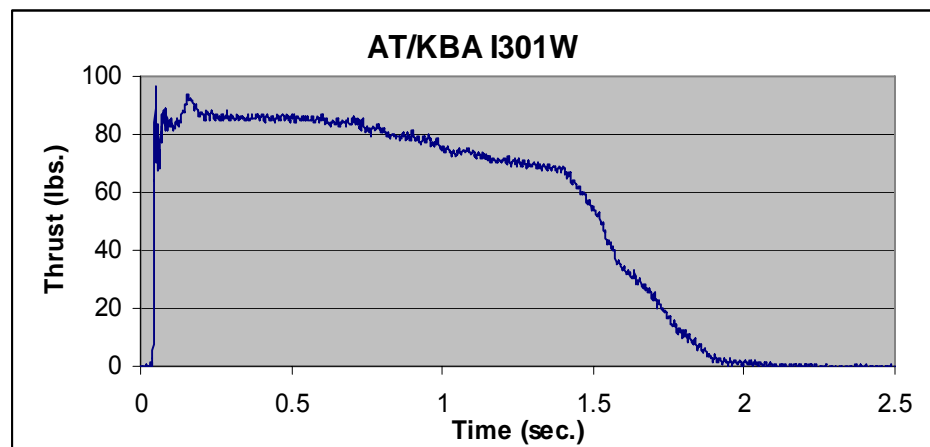
Total Impulse: 554 Newton-seconds
Delay Time: 18
Propellant Type: White Lightning
Propellant Mass: 310 grams
Casing Dimensions: 38mm × 370 mm
Certification Date: July 11, 2007
Certification Type: High Power Rocket Motor

STATIC TEST DATA

Date Tested: June 16, 2007
Total Impulse: 554 Newton-seconds (σ 1)
Peak Thrust: 433 Newtons (σ 24)
Burn Time: 1.84 seconds (σ 0.002)
Average Thrust: 302 Newtons (σ 1)
Mass After Firing: 402.6 grams

Delay Time(sec.)	18		
Average Measured Delay(sec.)	17.77		
Initial Mass (gm.)	725.5		

TYPICAL THRUST-TIME CURVE



REMARKS

Certified for use in AMW 38-640 hardware only.
No Substitutions allowed



Data File		Total	Peak	Average	Burn	Delay	Initial	Fired
#	Engine	Impulse	Thrust	Thrust	Time	Time	Weight	Weight
070616W01	I301W-18	553.1	415.8	301.1	1.84	17.61	725.8	402.4
070616W04	I301W-18	554.2	450.2	302.2	1.83	17.92	725.2	402.8
Average		553.7	433.0	301.7	1.84		725.5	402.6
Std Dev		0.778	24.324	0.778	0.002			
Std Dev %		0.1%	5.6%	0.3%	0.1%			
Range	Indicated	Actual	Actual	Actual	Actual	Actual	Average	
15 to 21	18	17.61	17.92				17.77	

; @File: 070616w04.txt, @Pts-I: 1476, @Pts-O: 32, @Sm: 5, @CO: 5%
; @TI: 571.532, @Tia: 567.398, @Tie: 0.0%, @ThMax: 425.949, @ThAvg: 305.545, @Tb: 1.857
; Exported using ThrustCurveTool, www.ThrustGear.com

I301 38 370 18 0.31 0.726 RCS/Aerotech

0.0 3.18934
0.53 3.92066
0.564 5.37819
0.568 13.53374
0.57 26.4751
0.572 53.5591
0.58 229.491
0.584 299.768
0.5939 350.46
0.6099 394.268
0.6559 425.949
0.6959 409.428
0.7979 403.724
1.0359 405.575
1.1799 387.753
1.2419 397.421
1.3619 366.106
1.3959 361.801
1.4339 371.597
1.4639 353.61
1.4859 361.973
1.5619 327.006
1.6199 334.616
1.6459 321.224
1.7139 313.068
1.9359 299.878
2.1139 157.2409
2.2059 125.3714
2.3139 57.0407
2.4259 21.2315
2.6299 4.62153
2.9499 0.0