

# AEROTECH/KBA I301W

## CERTIFIED VALUES

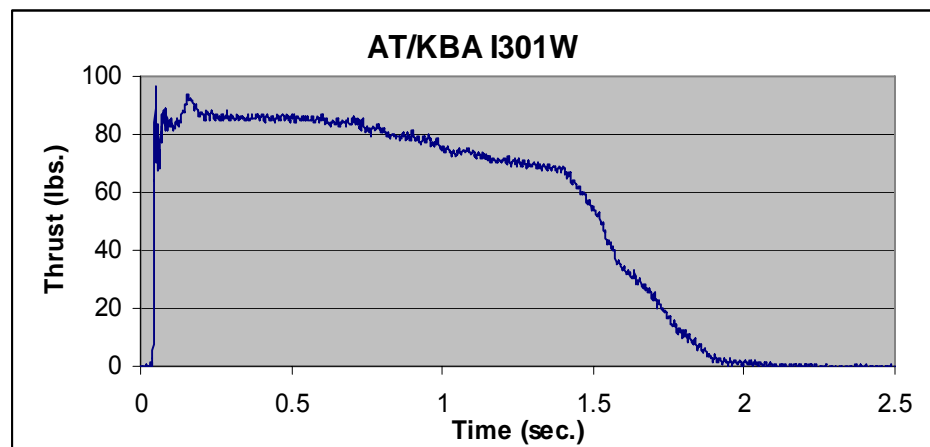
**Total Impulse:** 554 Newton-seconds  
**Delay Time:** 18  
**Propellant Type:** White Lightning  
**Propellant Mass:** 310 grams  
**Casing Dimensions:** 38mm × 370 mm  
**Certification Date:** July 11, 2007  
**Certification Type:** High Power Rocket Motor

## STATIC TEST DATA

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

<b>Delay Time(sec.)</b>	<b>18</b>		
<b>Average Measured Delay(sec.)</b>	17.77		
<b>Initial Mass (gm.)</b>	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%			
<b>Range</b>	<b>Indicated</b>	<b>Actual</b>	<b>Actual</b>	<b>Actual</b>	<b>Actual</b>	<b>Actual</b>	<b>Average</b>	
15 to 21	18	17.61	17.92				17.77	

; @File: I301w\_rev.eng, @Pts-I: 29, @Pts-O: 29, @Sm: 0, @CO: 5%  
; @TI: 555.139, @TIA: 553.056, @TIE: 0.0%, @ThMax: 416.021, @ThAvg: 299.922, @Tb: 1.844  
; Exported using ThrustCurveTool, www.ThrustGear.com  
I300 38 370 18 0.31 0.726 RCS/Aerotech

0.0 9.476  
0.0020 22.233  
0.0040 48.932  
0.012 222.359  
0.016 291.636  
0.0259 341.606  
0.0419 384.791  
0.0879 416.021  
0.1279 399.735  
0.2299 394.112  
0.4679 395.937  
0.6119 378.369  
0.6739 387.899  
0.7939 357.03  
0.8279 352.786  
0.8659 362.443  
0.8959 344.712  
0.9179 352.956  
0.9939 318.486  
1.0519 325.988  
1.0779 312.787  
1.1459 304.747  
1.3679 291.744  
1.5459 151.138  
1.6379 119.722  
1.7459 52.364  
1.8579 17.064  
2.0619 0.691  
2.2 0.0