

AEROTECH KBA I550R

CERTIFIED VALUES

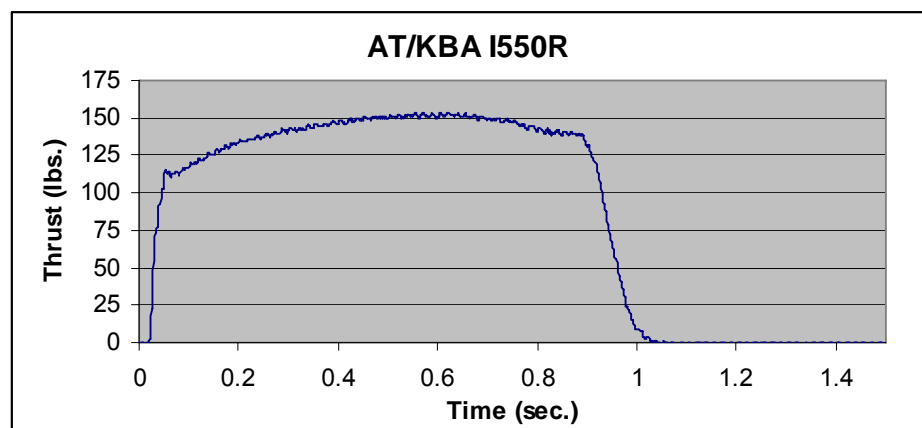
Total Impulse: 575 Newton-seconds
Delays: 20
Propellant Type: Redline
Propellant Mass: 295
Casing Dimensions: 38mm × 370mm
Certification Date: July 11, 2007
Certification Type: High Power Rocket Motor

STATIC TEST DATA

Date Tested: June 16, 2007
Total Impulse: 575 Newton-seconds (σ .14)
Peak Thrust: 689 Newtons (σ 15)
Burn Time: 0.98 seconds (σ 0.01)
Average Thrust: 587 Newtons (σ 7.7)
Mass After Firing: 403 grams

Delay Time(sec.)	20		
Average Measured Delay(sec.)	20.9		
Initial Mass (gm.)	711.6		

TYPICAL THRUST-TIME CURVE



REMARKS

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



Data File		Total	Max	Average	Burn	Delay	Initial	Fired
#	Engine	Impulse	Thrust	Thrust	Time	Time	Weight	Weight
070616W03	I550R-20	575.3	677.5	581.1	0.99	21.57	711.3	401.3
070616W05	I550R-20	575.5	699.4	592.0	0.97	20.24	711.9	404.2
Average		575.4	688.5	586.6	0.98		711.6	402.8
Std Dev		0.141	15.486	7.707	0.014			
Std Dev %		0.0%	2.2%	1.3%	1.4%			
Range	Indicated	Actual	Actual	Actual	Actual	Actual	Average	
17 to 23	20	21.57	20.24				20.91	

; @File: 070616w05.txt, @Pts-I: 573, @Pts-O: 31, @Sm: 5, @CO: 5%
; @TI: 571.133, @TIA: 570.714, @TIE: 0.0%, @ThMax: 685.894, @ThAvg: 584.748, @Tb: 0.976
; Exported using ThrustCurveTool, www.ThrustGear.com

I550R 38 370 20 0.295 711.6 RCS/Aerotech

0.0040 10.04732
0.0060 25.4934
0.01 93.376
0.018 246.087
0.028 365.158
0.032 403.241
0.038 446.67
0.046 463.95
0.07 475.946
0.19 583.865
0.274 621.187
0.424 669.879
0.53 684.874
0.568 678.609
0.658 680.575
0.74 662.234
0.8 630.732
0.832 629.127
0.86 637.791
0.874 631.954
0.89 582.662
0.898 547.171
0.908 489.757
0.934 290.466
0.952 166.1998
0.966 87.7477
0.984 29.5776
1.0 7.75048
1.01 2.88272
1.092 0.0