

Estes L2350

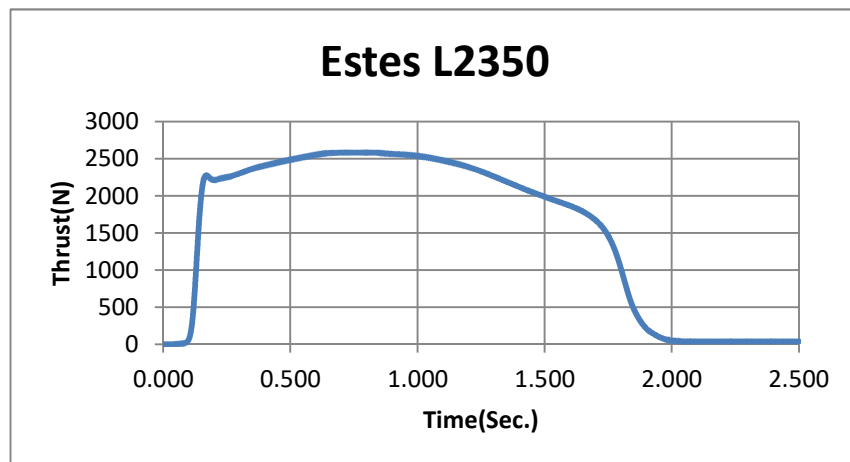
CERTIFIED VALUES

TOTAL IMPULSE: 3886 NEWTON-SECONDS
DELAYS: PLUGGED
PROPELLANT TYPE: EX 2020092576
PROPELLANT MASS: 1680 GRAMS
CASING DIMENSIONS: 152MM × 210MM
CERTIFICATION DATE: APRIL 17, 2021
CERTIFICATION TYPE: HIGH POWER ROCKET MOTOR

STATIC TEST DATA

DATE TESTED: 4/9/2021
TOTAL IMPULSE: 3886 NEWTON-SECOND (Σ 121)
PEAK THRUST: 2585 NEWTONS (Σ 37.2)
BURN TIME: 1.82 SECONDS (Σ 0.05)
AVERAGE THRUST: 2129 NEWTONS (Σ 17.7)
MASS AFTER FIRING: 3844.5 GRAMS

TYPICAL THRUST-TIME CURVE



REMARKS

Single Use Motor
Tested at 5276 ft. MSL, Performance Corrected to Sea Level



Data File #	Engine	Total Impulse	Max Thrust	Avg Thrust	Burn Time	Delay Time	Init Weight	Fired Weight
Estes_38	L2350	3846	2556	2110	1.78	Plugged	5532.6	3835.5
Estes_56	L2350	3789	2572	2132	1.82	Plugged	5538.3	3853.8
Estes_58	L2350	4022	2627	2145	1.87	Plugged	5579.7	3844.2
Average								
		3886	2585	2129	1.82		5550.2	3844.5

Std Dev		121.46	37.24	17.69	0.05
Relative Std Dev %		3.13%	1.44%	0.83%	2.55%

; @File: Estes_L2350_Composite.eng, @Pts-I: 33, @Pts-O: 31, @Sm: 0, @CO: 5%
; @TI: 3907.52, @TIa: 3860.62, @Tle: 0.0%, @ThMax: 2583.67, @ThAvg: 2137.59, @Tb: 1.828
; Exported using ThrustCurveTool, www.ThrustGear.com

L2138 152 0 Plugged 1.680002 0.0 Estes

0.086 17.84847
0.098 50.6967
0.1061 128.9007
0.1124 259.048
0.1196 514.268
0.1256 807.721
0.1392 1568.618
0.1476 1942.279
0.1512 2058.99
0.156 2171.68
0.1656 2270.85
0.2036 2212.94
0.378 2390.31
0.5616 2528.52
0.6447 2574.59
0.7668 2583.67
0.992 2540.81
1.1684 2419.51
1.6028 1862.428
1.664 1761.523
1.7144 1626.792
1.7504 1458.055
1.7828 1205.372
1.8324 638.272
1.8528 457.873
1.8924 238.795
1.9342 129.0342
1.98 61.9133
2.0472 39.0352
2.9996 43.0856
3.0006 0.0