

TT-01-Jun-2010.txt

blade material: BeCu
blade thickness: 0.254 mm (0.01 inch)
width at the base: 26 mm (1.0236 inch)
width at the tip: 1e-07 mm (3.937e-09 inch)
blade length: 50 mm (1.9685 inch)
Beta (width at tip/width at base): 3.8462e-09
Alpha (1.3 - 1.45): 1.5
second moment of inertia (cross section): 3.5505e-14 m⁴

effective spring constant: 74.4191 N/m
effective mass: 0.0626 kg
effective resonance frequency: 5.4875 Hz
deflection: 8.252 mm
maximum stress: 109.8307 MPa
pre-curved radius at rest: 0.15148 m
distance base to tip underload: 49.7733 mm
angle at blade tip is: 19.2736 deg
suspension wire angle: 8.4307 deg
angle blade base is mounted (90 deg of wire to clamp): 10.8429 deg