

# Freeform Data Sheet

## Characteristics

<b>Actuation Force*</b>	~0.2N min
<b>Force Sensitivity Range*</b>	~0.2N – 20N
<b>Force Resolution</b>	Continuous (analog)
<b>Force Repeatability Single Part</b>	+/- 2%
<b>Force Repeatability Part to Part</b>	+/- 6% (Single Batch)
<b>Non-Actuated Resistance</b>	>10 Mohms
<b>Hysteresis</b>	+10% Average (RF+ - RF -)/RF+
<b>Device Rise Time</b>	< 3 Microseconds
<b>Long Term Drift - kg load, 35 days</b>	< 5% log10(time)
<b>Operating Temperature Performance</b> Cold: -40C after 1 hour Hot: +85C after 1 hour Hot Humid: +85C 95RH after 1 hour	- 5% average resistance change -15% average resistance change +10% average resistance change
<b>Storage Temperature Performance</b> Cold: -25C after 120 hours Hot: +85C after 120 hours Hot Humid: +85C 95RH after 240 hours	- 10% average resistance change -5% average resistance change +30% average resistance change
<b>Tap Durability</b> Tested to 10 Million actuations, 1kg, 4Hz	- 10% average resistance change
<b>Standing Load Durability</b> 2.5kg for 24 hours	- 5% average resistance change
<b>EMI</b>	Generates no EMI
<b>ESD</b>	Not ESD Sensitive
<b>UL</b>	All materials UL grade 94 V-1 or better
<b>RoHS</b>	Compliant

Specifications are derived from measurements taken at 1000 grams, and are given as (one standard deviation/mean), unless otherwise noted.

\*Typical value. Force dependent on actuation interface, mechanics, and measurement electronics.