

# ANPx341/RES/HV - linear x-nanopositioner

1006754

## Technical Specifications

|                                       |                                |
|---------------------------------------|--------------------------------|
| <b>Size and Dimensions</b>            |                                |
| footprint; height                     | 44 mm x 45 mm; 11.5 mm         |
| maximum installation space            | 44 mm x 61 mm x 11.5 mm        |
| weight                                | 82.2 g                         |
| <b>Materials</b>                      |                                |
| positioner body                       | titanium                       |
| actuator                              | PZT ceramics                   |
| connecting wires                      | insulated twisted pair, copper |
| <b>Coarse Positioning Mode</b>        |                                |
| travel range (step mode)              | 20 mm                          |
| maximum drive velocity @ 300 K        | ~ 3 mm/s                       |
| input voltage range                   | 0 - 60 V                       |
| <b>Fine Positioning Mode</b>          |                                |
| fine linear positioning range @ 300 K | 5 $\mu$ m                      |
| fine positioning resolution           | sub-nm                         |
| input DC voltage range @ 300 K        | 0 - 100 V                      |
| <b>Position Encoder</b>               |                                |
| readout mechanism                     | resistive sensor               |
| encoded travel range                  | full travel                    |
| sensor resolution                     | ~ 200 nm                       |
| sensor power (when measuring)         | 0.01 - 1 mW                    |
| repeatability                         | 1..2 $\mu$ m (unidirectional)  |
| <b>Load (@ ambient conditions)</b>    |                                |
| maximum load                          | 2 kg                           |
| maximum dynamic force along the axis  | 2 N                            |
| <b>General Specifications</b>         |                                |
| environment                           | /HV                            |

