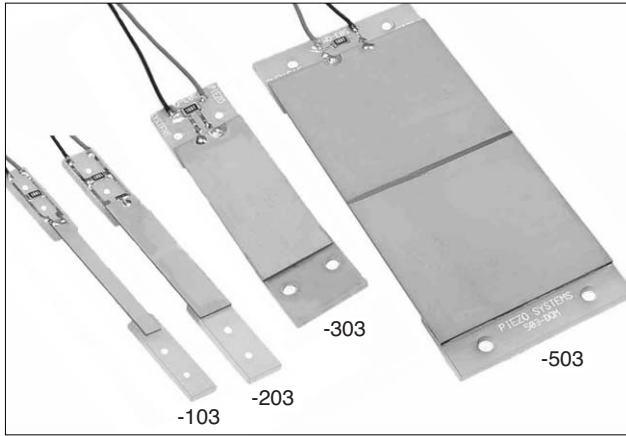


### STD. DOUBLE-QUICK-MOUNT EXTENSION GENERATORS PRE-MOUNTED AND WIRED, TWO ENDS



#### DESCRIPTION

When a mechanical force causes a suitably wired and polarized 2-layer element to extend (or contract), both layers are stretched (or compressed) at the same time. Charge develops across each layer in an effort to counteract the imposed strain. This charge may be collected for strain sensing or power generation.

Double Quick-Mount extension sensors save users the trouble of mounting and wiring transducer elements. They are easily attached and removed from equipment using the two clearance holes in the PCB mounts. They are wired for parallel operation. The user may opt to remove the board mounted bleed resistor which protects the transducer and user electronics from transient voltages arising from thermal and mechanical shocks. The user mounts the transducer to the source of mechanical strain.

Standard Double Quick-Mount Extenders are more economically priced than other Double Quick-Mount configurations, and are generally stocked for immediate delivery.

Standard Double Quick-Mount Extenders employ T220-A4-103X, T220-A4-203X, T220-A4-303X or T220-A4-503X standard brass reinforced transducers.

Dimensions for Standard Double-Quick-Mounts are shown on [page 46](#).

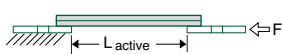
Custom configurations and sizes: Upon request.

**ROHS: Compliant.**

#### PERFORMANCE: DOUBLE QUICK-MOUNT EXTENSION GENERATORS (Cantilever)

VALUES TO BE USED AS GUIDELINES

| PART NUMBERS<br>DOUBLE QUICK-MOUNT<br>EXTENSION GENERATORS | PIEZO MATERIAL | WEIGHT (grams) | STIFFNESS (N/m) | CAPACITANCE (nF)<br>(Parallel Operation) | RATED TIP DEFLECTION ①<br>( $\mu\text{m}_{\text{peak}}$ ) | RATED FREQUENCY ①<br>(Hz) | OPEN CIRCUIT VOLTAGE ①<br>At rated deflection, parallel operation<br>(V <sub>peak</sub> ) | CLOSED CIRCUIT CURRENT ①<br>Per sinusoidal cycle, at rated deflection,<br>parallel operation. ( $\mu\text{A}_{\text{peak}}$ / Hz) | RATED OUTPUT POWER ①<br>At rated deflection and frequency<br>(mW <sub>rms</sub> ) |
|--|----------------|----------------|-----------------|--|---|---------------------------|---|---|---|
|  |                |                |                 |  |   |                           |   |   |   |
| D220-A4-103XE  | 5A4E           | 1.1            | $2 \times 10^6$ | 12                                       | $\pm 13$  | 1500                      | $\pm 64$  | $\pm 5$   | 60  |
| D220-A4-203XE  | 5A4E           | 1.7            | $3 \times 10^6$ | 26                                       | $\pm 13$  | 1500                      | $\pm 64$  | $\pm 10$  | 120   |
| D220-A4-303XE  | 5A4E           | 2.7            | $7 \times 10^6$ | 52                                       | $\pm 13$  | 1500                      | $\pm 64$  | $\pm 21$  | 240   |
| D220-A4-503XE  | 5A4E           | 10.4           | $8 \times 10^6$ | 260                                      | $\pm 25$  | 750                       | $\pm 64$  | $\pm 105$   | 630   |



-103, -203, and -303 Double Quick-Mount extension generator performance is based on an active extension length of 1.0". -503 performance based on 2.0" active length. Double Quick-Mount performance is based on the force being applied at the outermost tip of the mount.

#### PRICE & ORDERING INFORMATION

#### PART NO.

1 pc

5

25

100

|  |               |       |       |       |       |
|--|---------------|-------|-------|-------|-------|
| Std Double QM Extension Generator, -103 Size | D220-A4-103XE | \$184 | \$104 | \$69  | \$53  |
| Std Double QM Extension Generator, -203 Size | D220-A4-203XE | \$189 | \$114 | \$74  | \$56  |
| Std Double QM Extension Generator, -303 Size | D220-A4-303XE | \$209 | \$134 | \$84  | \$67  |
| Std Double QM Extension Generator, -503 Size | D220-A4-503XE | \$249 | \$179 | \$134 | \$109 |