

### **Professional Trimmers**



# Type 4290 Series



Where size and reliability are critical, this range of 10mm square multiturn trimming potentiometers satisfies the requirements in industrial and professional applications.

The cermet resistance element offers stability and high resolution. The trimmer is actuated by a lead screw with a slipping clutch at each end of travel. Top or side adjustment components are available and pin configurations meet the majority of requirements. All units are fully sealed to withstand immersion in board washing solvents.

#### **Key Features**

- High Stability Cermet Element
- 0.5 Watt Rating at 70°C
- Slim Profile Assists Stacking
- Top & Side Adjustment Styles Available
- Flame Retardant Case

### Type 4290 Series

#### Characteristics -Electrical

| Resistance Range:         | 10R to 2M                                   |
|---------------------------|---|
| Resistance Values:        | 1, 2 and 5 in each decade                   |
| Resistance Tolerance:     | ± 10%                                       |
| End Resistance:           | 2 ohms or 1% whichever is greater           |
| Slider Current:           | 100 mA DC or AC, maximum                    |
| Power Rating:             | 0.5 Watts at 70°C derating to zero at 125°C |
| solation Voltage:         | 430 V DC or AC peak                         |
| Limiting Element Voltage: | 300 V DC or AC RMS, maximum                 |
| Breakdown Voltage:        | 900 V AC for one minute                     |
| nsulation Resistance:     | 1000 M at 500 V DC, minimum                 |
| Resolution:               | Essentially Infinite                        |
| Rotational Noise (CRV):   | 3 Ohms or 1 %, whichever is greater         |
| Temperature Coefficient:  | ± 250 ppm/°C, maximum                       |
| Electrical Adjustment:    | 25 turns                                    |

## **Characteristics -**

Mechanical

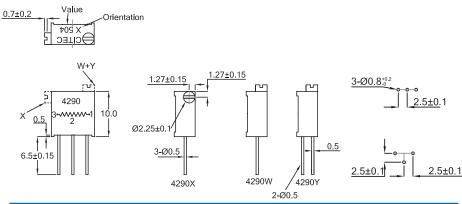
| End Stop:        | Slipping clutch both ends |
|------------------|---------------------------|
| Starting Torque: | 35 mNm                    |
| Weight:          | 0.8 gram, approx.         |

# Characteristics -

Environmental

| Temperature Range:   | -55°C to +125°C                                |
|----------------------|--|
| Temperature Storage: | 1000 Hrs at 125°C                              |
| Thermal Shock:       | 5 Cycles -55°C to +125°C                       |
| Bump Severity:       | 4000 Bumps; 40 G (3mm or 390m/s <sup>2</sup> ) |
| Vibration Severity:  | 10 - 500Hz; 20 G                               |
| Rotational Life:     | 200 Cycles                                     |
| Load Life at 85°C:   | $\Delta R$ <3% after 1000 hours                |
| Sealing:             | Sealed for board washing                       |
| Climatic Category:   | 55/125/21                                      |

### Dimensions



#### How to Order

| 4290        | W                                 | 502   | K         |
|-------------|-----------------------------------|---|-----------|
| Common Part | Pin Configuration                 | Resistance Value  | Tolerance |
| 4290        | W - Top Adjust<br>X - Side Adjust | The first two digits are<br>significant figures of<br>resistance value and the<br>third denotes the number<br>of zeros following. | K - ±10 % |
|             | Y - Top Adjust                    | e.g. 1K: 102<br>10K: 103<br>100K: 104   |           |

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reference purposes only.

Dimensions are in millimetr unless otherwise specified. Specifications subject to change.

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