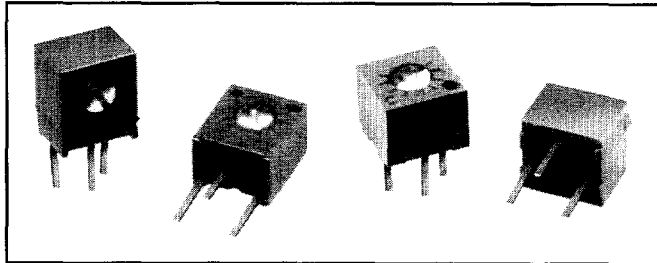




## Cermet Trimmers

Miniature, Industrial Grade



### FEATURES

- 0.50 watt at + 85°C.
- Typical contact resistance variation of 1%.
- Fully sealed.
- Wide temperature range - 55°C to + 125°C.
- Easy to read scale.
- Excellent stability owing to multi-contact wiper in precious metal.

### APPLICATIONS

The trimming potentiometer can be mounted on PCB's as an alternative to most of the current 3/8" [9.53mm] square trimmers with the advantage of a significantly smaller size 9/32" [7.14mm].

### ELECTRICAL SPECIFICATIONS

- Electrical Travel:** 260° ± 15°.
- Resistance Range:** 10 ohms to 2.2M ohms.
- Standard Series:** 1 - 2 - 5 and E-3 (1 - 2.2 - 4.7).
- Resistance Tolerance:** ± 10% standard.  
± 5% available.
- Temperature Coefficient:** ± 100PPM/°C (- 55°C to + 125°C)  
for Rn ≥ 100 ohms typical.
- Power Rating (Linear law):** 0.50 watt at + 85°C.  
Logarithmic not applicable.
- Limiting Element Voltage (Linear law):** 250V.
- Contact Resistance Variation:** 1% Rn or 2 ohms.
- End Resistance Variation:** 1 ohm typical.
- Dielectric Strength:** 1000 V RMS.
- Insulation Resistance:** 10<sup>6</sup>M ohms (500 VDC).

### MECHANICAL SPECIFICATIONS

- Mechanical Travel:** 300° ± 5°.
- Operating Torque:** 2.8 oz. in. maximum.
- End Stop Torque:** 5.6 oz. in. minimum.
- Unit Weight:** 0.02 ounce maximum.
- Resistive Element:** Cermet.

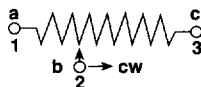
### ENVIRONMENTAL SPECIFICATIONS

- Temperature Range:** - 55°C to + 125°C.
- Climatic Category:** 55/100/56.
- Sealing:** Fully sealed container IP67. Water washable.

### STANDARD RESISTANCE ELEMENT DATA

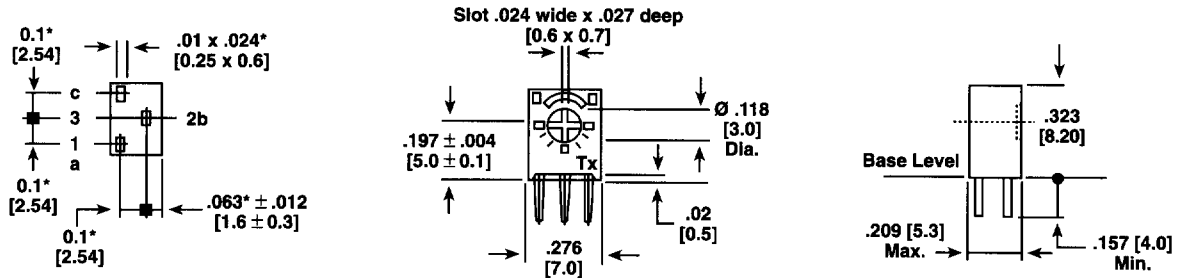
STANDARD RESISTANCE VALUES (Ohms)	LINEAR LAW			T.C. - 55°C + 125°C PPM/°C
	MAXIMUM POWER @ + 85°C (Watts)	MAXIMUM WORKING VOLTAGE (Volts)	MAXIMUM CURRENT THROUGH ELEMENT (mA)	
10	0.50	2.2	224.0	0 + 200
20	0.50	3.3	150.0	
50	0.50	4.8	103.0	
100	0.50	7.0	70.0	± 100
200	0.50	10.5	47.0	
500	0.50	15.3	32.0	
1k	0.50	22.4	22.0	
2k	0.50	33.2	15.0	
5k	0.50	48.5	10.0	
10k	0.50	70.7	7.0	
20k	0.50	105.0	4.8	
50k	0.50	153.0	3.2	
100k	0.50	224.0	2.2	
200k	0.28	250.0	1.1	
500k	0.13	250.0	1.53	
1M	0.06	250.0	0.25	
2M	0.028	250.0	0.11	

### CIRCUIT DIAGRAM

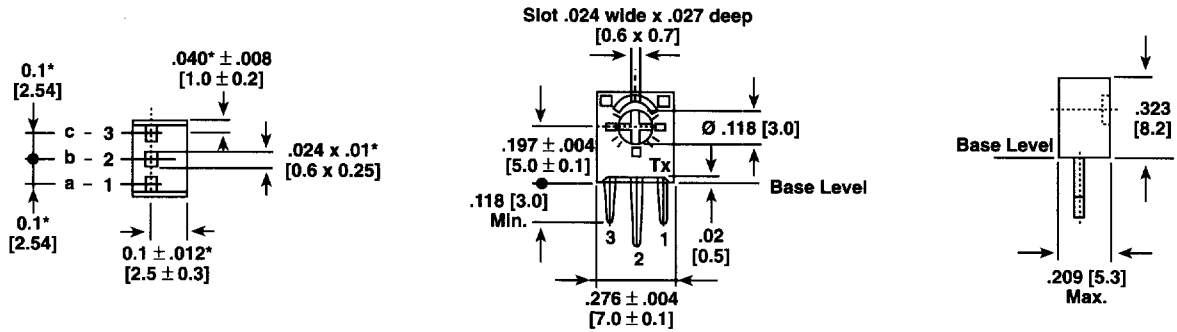


## DIMENSIONAL CONFIGURATIONS [Numbers in brackets indicate millimeters]

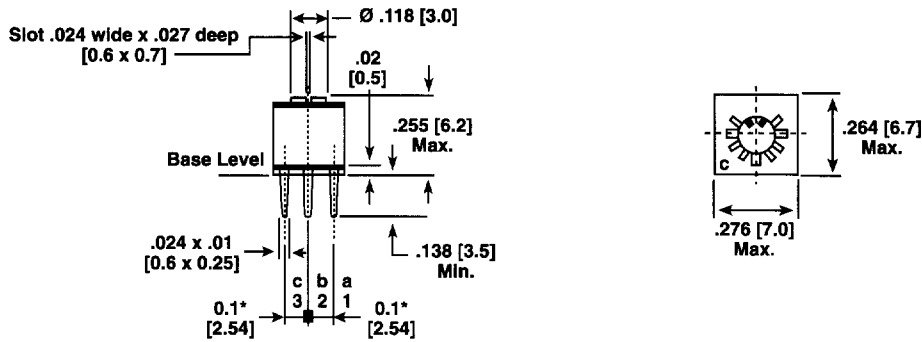
TX



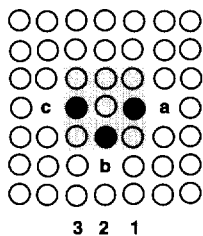
TXD



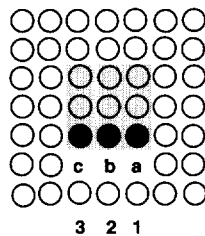
TY



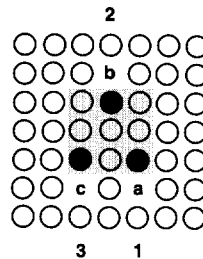
TYA



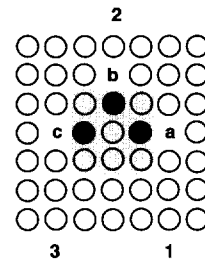
TYD



TYM



TYP



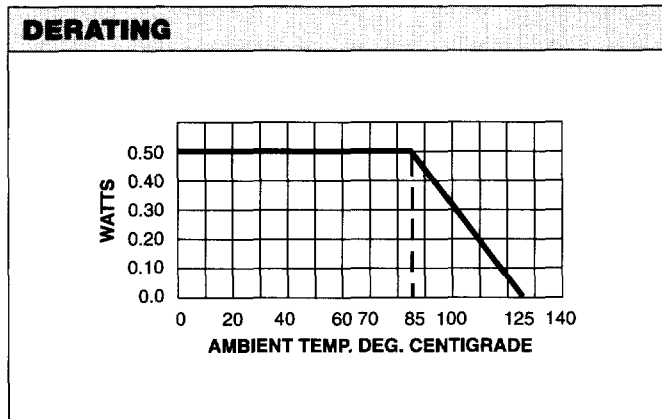
\*To be measured at base level.

# Models TX, TXD, TY (A, D, M, P)

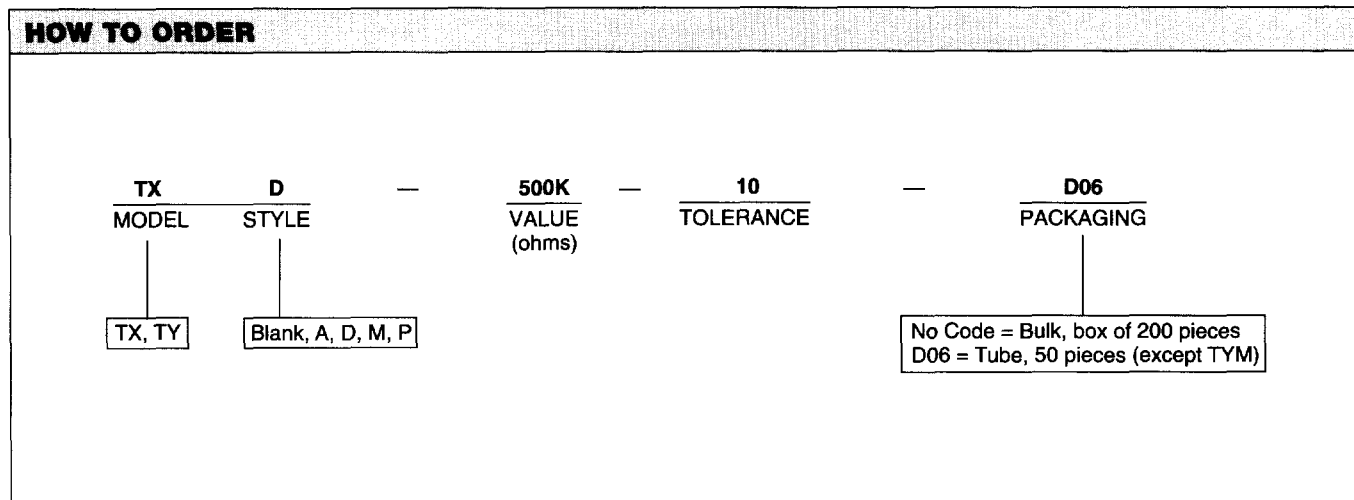
Vishay Sfernice



ENVIRONMENTAL PERFORMANCE			
TEST	CONDITIONS	TYPICAL VALUES AND DRIFTS	
		$\frac{\Delta R_{ac}}{R_{ac}}$ %	$\frac{\Delta R_{ab}}{R_{ab}}$ %
Climatic Sequence	Phase A dry heat + 100°C Phase B damp heat Phase C cold - 55°C Phase D damp heat 5 cycles	1%	2%
Long Term Damp Heat	56 days	1% Dielectric strength: 1000 V RMS Insulation resistance: > 10 <sup>12</sup> ohms	2%
Rapid Temperature Change	5 cycles - 55°C to + 125°C	1%	$\Delta \frac{V_{ab}}{V_{ac}}$ 2%
Shock	50 g 11ms 3 successive shocks in 3 directions	0.5%	1%
Vibration	10 - 55Hz 0.75mm or 10 g during 6 hours	0.5%	$\Delta \frac{V_{ab}}{V_{ac}}$ 2%
Rotational Life	200 cycles	3% Contact resistance variation: < 2% R <sub>n</sub>	—
Load Life	1000 hours at rated power 90/30' - ambient temperature + 70°C	1% Contact resistance variation: < 1% R <sub>n</sub>	2%



- ### PART MARKING
- Trademark
  - Model
  - Style
  - Value
  - Manufacturing date
  - Marking of terminal: 3



**NOTE:** On delivery, the wiper is positioned at mid-travel.