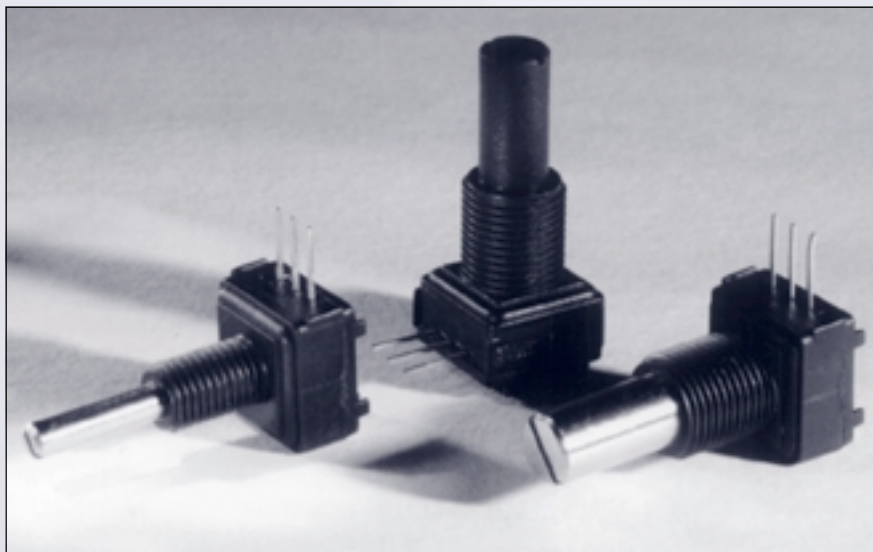


## 248&amp;249

Conductive Plastic  
& Cermet Potentiometers

Based on the highly successful MODEL 148/149 series, the MODEL 248/249 retains the proven high performance characteristics in a more cost effective package.

With its many features, the MODEL 248/249 series is destined to become the first choice when seeking high quality, cost effective panel or P.C.B. mounting potentiometers.

**ELECTRICAL**

Element Type:

248: Conductive Plastic  
249: Cermet

Total Resistance Range:

500 ohms to 500K ohms

Resistance Tolerance:

248:  $\pm 20\%$   
249:  $\pm 10\%$ 

Power Rating:

248: 0.5 watts @ 70°C  
249: 1.0 watts @ 70°C  
Both derated to zero @ 125°C

Temperature Coefficient of Resistance:

248:  $\pm 1000\text{ppm}/^\circ\text{C}$   
249:  $\pm 100\text{ppm}/^\circ\text{C}$ 

Linearity Tolerance:

 $\pm 5\%$  Independent

Contact Resistance Variation:

Both 3% of the Total Resistance

Insulation Resistance:

1000 M $\Omega$  minimum, 500VDC

Dielectric Strength:

750 volts RMS minimum 50Hz

End Resistance:

2 ohms maximum each end

Effective Electrical Angle:

 $265^\circ \pm 5^\circ$ **MECHANICAL**

Rotation:

 $295^\circ \pm 5^\circ$ 

Torque:

Starting and Running  
1.5 to 18.75mNm

End Stop Torque:

0.35Nm (50oz in)

Weight:

8.3 grammes (0.29 oz)  
(1/4" x 7/8" FMF metal shaft)

Max Tightening Torque:

0.50Nm (1/4" Bush)  
0.70Nm (3/8" Bush)**ENVIRONMENTAL**

Temperature Range:

-55°C to +125°C

Shock:

390 metres/s/s, 1000 bumps

Vibrations:

98 metres/s/s, 0.75mm, 10 to 500Hz

Rotational Life: (Electrical)

248: 50,000 cycles

249: 25,000 cycles

Load Life @ 70°C:

1000 hours

Materials:

Shaft:

Plated brass or plastic

Housing &amp; Rear Lid:

Plastic flame retardant

Terminals:

Phosphor bronze, solder plated

Mounting hardware:

Lockwasher: Steel, nickel plated

Panel nut: Brass, nickel plated

# 248 & 249

Conductive Plastic  
& Cermet Potentiometers

## DIMENSIONS

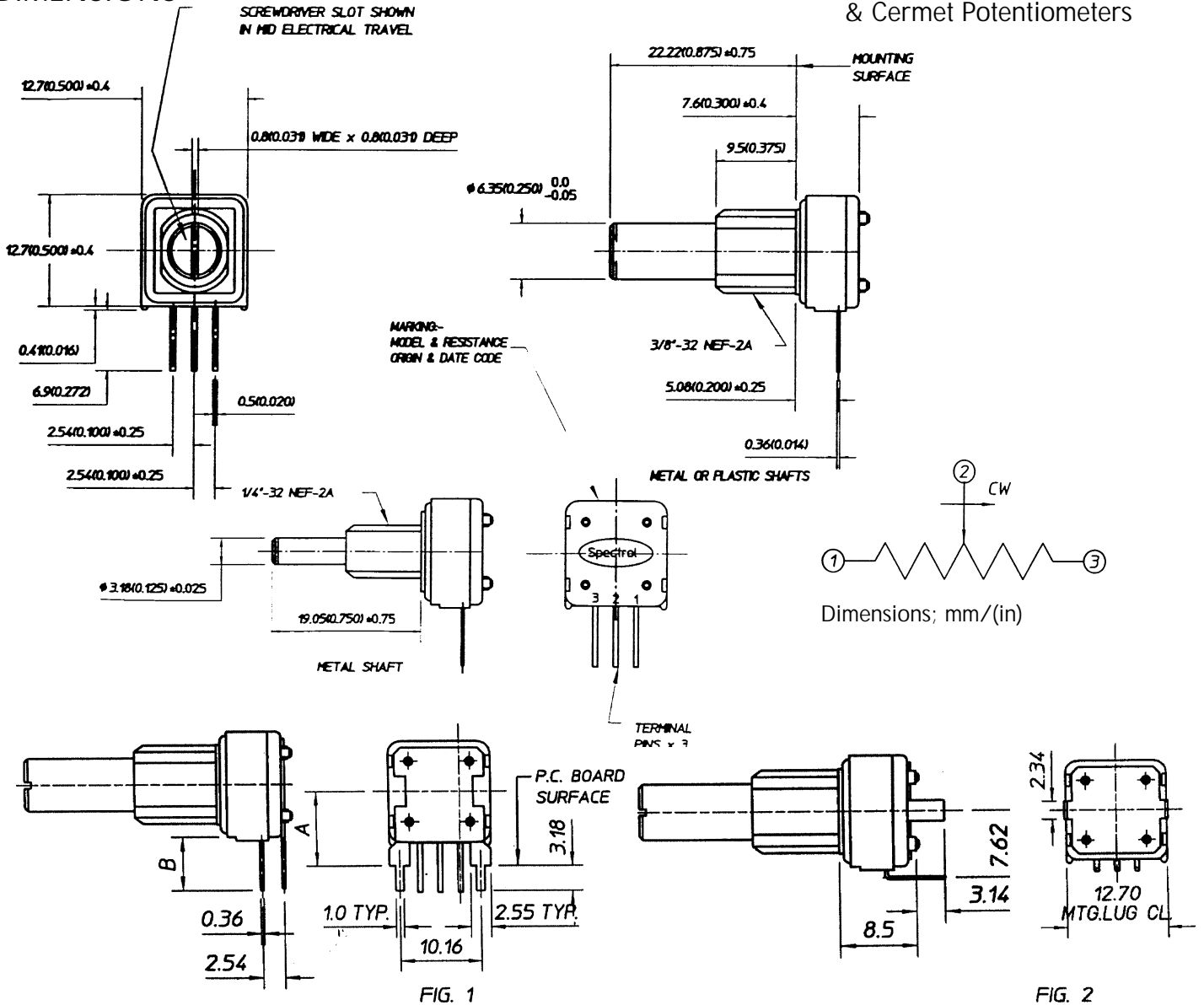


FIG. 1

FIG. 2

## ORDERING INFORMATION

248 - JE - 8 - 08 - 103

Model Number

Special Features	
D	Rear locating lugs
E	Type 1 rear stand offs
F	Type 2 rear stand offs
J	CW audio taper

See Fig. 1 & Fig. 2

Shaft Options	
7	6.35 (1/4") plastic
8	3.18 (1/8") plated brass
9	6.35 (1/4") plated brass

FMF Shaft Options	
08	19.05 (3/4") for 3.18 (1/8") plated brass
10	22.22 (7/8") for 6.35 (1/4") plated brass or plastic versions

Res Code	Standard values
501	501
102	1K
252	2K5
502	5K
103	10K
253	25K
503	50K
104	100K
254	250K
504	500K

