

Electronic versus Mechanical Potentiometers— A Comparison

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	Electronic	Mechanical
Manufacturer:	COPAL	BC Components (Beyschlag Centralab)
Name:	DP7114	Model ST3, cermet
Rpot:	10k Ω , single	10k Ω , single
Rpot Tolerance:	15%	20%
Resolution:	32 taps	single turn, 210°
Package:	8L SOIC	3L surface mount
Purchase \$: (>100 units)	\$0.75	\$1.35
Assembly \$: (automated)	\$0.04-.08	\$0.04-.08
Pot Adjustment \$: (ATE)	<< \$0.01	\$0.12+0.20
Rotational Life:	infinite	200 cycles
Reliability:	< 100FITs	??
Field Service \$:	\$	\$\$\$

The assembly and test costs (California) were obtained from a leading contract manufacturer. Costs include overhead. The adjustment costs for mechanical pots have two parts: ATE costs and labor costs. Purchase prices are from known publications (2001). The examples of pots were chosen for similarity in basic performance and in package type.

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