

## **Product Specification**

Part No.: MS17ST series Potentiometer

## **Electrical Characteristics**

Resistance Range	$1 \text{K } \Omega \sim 1 \text{ meg } \Omega$
	For values outside this range, please consult our office.
Resistance Tolerance	$<5\%, \pm 5\%, \pm 10\%, \pm 20\%$
	Outside this range, please consult our office
Resistance Tapers	Linear
	Other tapers available. Please consult our office.
End Resistance	< 3 Ω
Independent Linearity	< 3% (< 1% available. Consult of our office for details)
Power Rating (wattage)	2 watts @ 70°/C , 0 watt @ 120 °/C
Peak Noise (Contact Resistance Variation)	< 2% Rn
Dielectric Strength	750VAC
Max. Input Voltage	250VDC
Electrical Angle of Rotation	$300^{\circ} \pm 5^{\circ}$
Insulation Resistance	$>$ 10 meg $\Omega$
Operating Voltage (max.)	250V AC
Resolution	Essentially Infinite

## **Environmental Characteristics**

Operating Temperature	<sup>-</sup> 25 ° to + 120°/C
Storage Temperature	<sup>-55</sup> ° to + 120°/C
Temperature Coefficient	< 500 ppm/ °C
Load Life	$\Delta R / R \le \pm 10\% (70^{\circ}/C 1000 \text{ hours})$
Operating Life	$\Delta R / R \le \pm 7\%$
IP Rating	IP50
Soldering Heat Resistance	$350$ °/C @ 3 seconds $\Delta$ R / R ≤ ± 7%
Temperature Cycling	( ~25°/C, +85 °/C @ 30 minutes each, 5 cycles)
	$\Delta R / R \le \pm 10\%$
Vibration	$(10-55 \text{ Hz}, 1.5 \text{mm amplitude}, 3 \text{ directions}) \Delta R / R \leq \pm 5\%$



## **Mechanical Characteristics**

Resistive Element	Conductive Plastic
Mechanical Angle of Rotation	330° ± 5°
Max. Torque at End Stops	>9.0 Kg-cm ( >7.8 Lb-in )
Wiper Torque	50 gr-cm ~ 500 gr-cm
	0.695 oz-in ~ 6.95 oz-in
Rotational Life	100K cycles (standard)
	500K cycles
	1 million cycles
	5 million cycles
	10 million cycles