

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Single-Turn Precision Potentiometer

Model 3381



Features:

- 1-5/16" diameter
- Conductive plastic





Electrical

Resistance Range	1K to 300K Ohms		
Standard Resistance Tolerance	±10%		
Minimum Practical Resistance Tolerance	±5%		
Independent Linearity ²	±0.5%		
Minimum Practical Independent Linearity	±0.25%		
Input Voltage	400 VDC maximum, not to exceed power rating		
Power Rating	2.0 Watts at 70°C, derating to 0 at 105°C		
Dielectric Strength	1,000 V rms		
Insulation Resistance	1,000 Megohms minimum		
Output smoothness	0.1% maximum		
Actual Electrical Travel	348° nominal		
Electrical Continuity Travel	350° minimum		
End Voltage	maximum 0.5% of input voltage		
Tap Tolerance	maximum 0.5% of input voltage		
Resolution	essentially infinite		
Temperature Coefficient of Resistance ³	-400 ppm/°C typical		
Temperature Coefficient of Output Voltage⁴	±10 ppm/°C typical		

Mechanical

Total Mechanical Travel	360° Continuous (350° ±2° with stop feature)	
Number of Gangs	1 maximum	
Weight	1.5 oz. nomina	
Shaft Runout	0.0025" maximum T.I.R.	
Pilot Diameter Runout	0.0025" maximum T.I.R.	
Lateral Runout	0.003"maximum T.I.R.	
Shaft Radial Play	0.004" maximum	
Start/Run Torque	1.0 ozin. maximum, ES option adds 0.5 ozin.	

Specifications subject to change without notice.

² Linearity is measured between 1% and 99% of input voltage.

Special TCR available to ±100 ppm/°C.
Measured with 10 VDC CW to CCW and slider at 50% of electrical travel

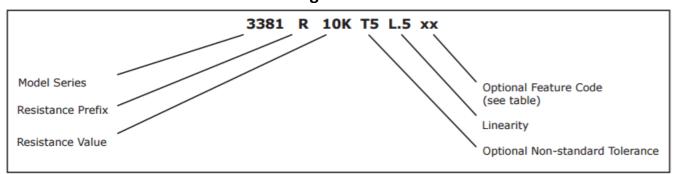
Single-Turn Precision Potentiometer



Environmental

Operating Temperature Range	-40°C to +125°C dynamic, -65°C to +125°C static
Temperature Cycling	5 cycles, -65°C to +125°C, maximum 10% ΔR
Shock	6 ms sawtooth, 100 G's, 0.1 ms maximum discontinuity
Vibration	10 G's, 10 to 500 Hz, maximum 2% ΔR, 0.1 ms maximum discontinuity
Moisture Resistance	five 24 hour cycles, maximum 25% ΔR
High Temperature Exposure	1,000 hours at 125°C, maximum 0.5% ΔR
Rotational Life	10 million shaft revolutions
Rotational Load Life	10 million shaft revolutions, maximum 10% ΔR
Ingress Protection Rating (IP Code)	IP50, IP66 available as option (feature code ES)

Ordering Information

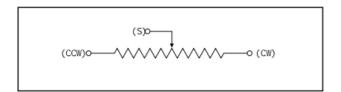


FEATURE CODES

Center Tap	СТ	
Linearity Tape	LT	
Flatted Shaft	FS	
Slotted Shaft	SS	
Shaft Lock	SL	
Stop	ST	
Seal (IP66)	ES	

When multiple Optional Feature codes are used the P/N shall be in the same sequence as listed in this table (top to bottom).

CIRCUIT DIAGRAM



STANDARD RESISTANCE VALUES

1K	5K	20K	100K
2K	10K	50K	

Issue B 02/2015 Page 2

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