

## WS Carbon Composition Potentiometer



### Features

- Hot-Molded / Industrial / Sealed
- Locking-Bushing / Standard-Bushing
- Meet MIL-R-94

**Electrical Characteristics**  
 Standard Resistance Range..... A: 100 to 4M7 ohms  
 ..... B/C: 1K to 1M ohms  
 Resistance Tolerance.....  $\pm 5\%$ ,  $\pm 10\%$ ,  $\pm 20\%$   
 Absolute Minimum Resistance..... 15 ohms  
 (for total resistance values of 100 to 820 ohms inclusive)  
 ..... 1%  
 (for total resistance values of 1K to 4700K ohms inclusive)  
 Contact Resistance Variation..... 5%  
 Insulation Resistance (100 VDC)....1,000 M ohms minimum  
 Power Rating: at 70°C  
 ..... A: 0.5 watt  
 ..... B/C: 0.25 watt  
 at 125°C ..... 0 watt

**Environmental Characteristics**  
 Temperature Range.....-55°C to +125°C  
 Vibration..... 15G  
 Shock..... 100G  
 Load Life: 1,000 hours, 70°C  
 ..... A: 0.5 watt  
 ..... B/C: 0.25 watt  
 Total Resistance Shift.....  $\pm 10\%$   
**Rotational Life**  
 WS-1/1A (Standard-Bushing Type)..... 10,000 cycles  
 Total Resistance Shift.....  $\pm 10\%$   
 WS-2/2A(Locking-Bushing Type)..... 500 cycles  
 Total Resistance Shift.....  $\pm 10\%$

**Mechanical Characteristics**  
 Total Mechanical Angle..... 270° minimum  
 Torque  
 Starting Torque..... 0.8 to 5 N•cm  
 Lock Torque(Locking-Bushing Type)..... 8 N•cm  
 Weight..... Approximately 8 gram

#### How To Order

WS- 1- 0.5- 4K7- 16- 3- A- M

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Model
- ② Bushing Style:  
1-- Standard bushing; 2--Lock Bushing
- ③ Power Rating  
0.5W--linear taper; 0.25W--log taper & anti-log taper
- ④ Standard Resistance: see standard resistance table
- ⑤ Length of Operating shaft (from mounting surface)
- ⑥ Shaft Style: 3--Slotted shaft; 5--Flatted shaft
- ⑦ Taper: Blank--Linear; B--Log; C--Anti-Log
- ⑧ Resistance Tolerance J = 5%, K = 10%, M = 20%

#### Standard Resistance Table (ohms)

100	1K	10K	100K	1M
120	1K2	12K	120K	1M2
150	1K5	15K	150K	1M5
180	1K8	18K	180K	1M8
220	2K2	22K	220K	2M2
270	2K7	27K	270K	2M7
330	3K3	33K	330K	3M3
390	3K9	39K	390K	3M9
470	4K7	47K	470K	4M7
560	5K6	56K	560K	
680	6K8	68K	680K	
820	8K2	82K	820K	

Special resistance available.



#### Derating Curve P.

