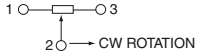




Cermet Potentiometers

Model ST-32 Surface Mount, Single-Turn



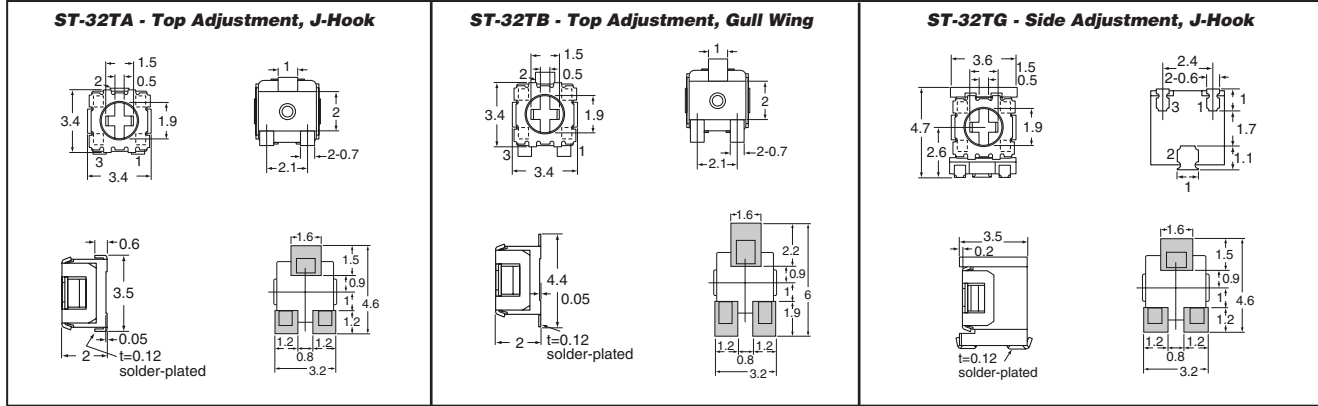
FEATURES: • Top and side adjustment styles • Has a rotor with a cross slot for ease of adjustment • Leaded terminals provide strong adhesive strength against P.C.B. bending • J-hook, Gull wing and leaded terminal configurations • Compatible with P.C.B. pad outline dimensions for ST-3 series • Sealed/Washable

ELECTRICAL: • Resistance Tolerance: $\pm 20\%$ • Power Rating: 0.125W at 70°C, 0W at 125°C • Input Voltage Maximum: 200VDC or power rating, whichever is less • Wiper Current Maximum: 100mA or power rating, whichever is less

• Effective Electrical Angle: 210° (1 turn) • End Resistance: 1% or 20, whichever is greater • Contact Resistance Variation: 1% or 30, whichever is greater • Operating Temperature Range: -55°C ~ 125°C • Insulation Resistance: 1000M Ω minimum at 500VDC Dielectric Strength: 500VAC, 60s

MECHANICAL: • Mechanical Angle: 250° (1 turn) • Operating Torque: 51 gram force-cm maximum • Minimum Stop Strength: 204 gram force-cm • Rotational Life: 100 cycles ($\Delta R/R \leq 2.0 + 3\%$)

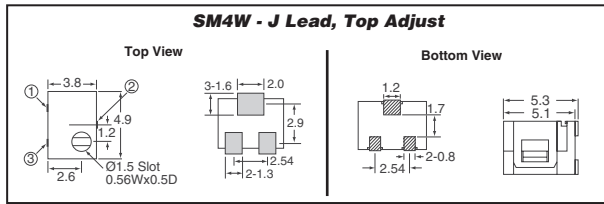
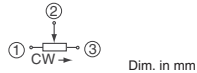
Dim. in mm



Res. (Ω)	Digi-Key Part No.	Digi-Key Part No.	Cut Tape Price Each	10	100	Digi-Key Part No.	Digi-Key Part No.	T&R Pricing* 500	Res. (Ω)	Digi-Key Part No.	Cut Tape Price Each	10	100
10	ST32TA100CT-ND	ST32TB100CT-ND	2.21	1.60	1.60	ST32TA100TR-ND	ST32TB100TR-ND	551.25	10	ST32TG100CT-ND	2.66	1.92	1.92
20	ST32TA200CT-ND	ST32TB200CT-ND	2.21	1.60	1.60	ST32TA200TR-ND	ST32TB200TR-ND	551.25	20	ST32TG200CT-ND	2.66	1.92	1.92
50	—	ST32TB500CT-ND	2.07	1.50	—	—	ST32TB500TR-ND	517.50	50	ST32TG500CT-ND	2.48	1.79	1.79
100	ST32TA101CT-ND	—	2.07	1.50	—	—	—	517.50	200	ST32TG201CT-ND	2.48	1.79	1.79
200	ST32TA201CT-ND	ST32TB201CT-ND	2.07	1.50	—	—	ST32TB201TR-ND	517.50	500	ST32TG501CT-ND	2.48	1.79	1.79
300	—	ST32TB301CT-ND	2.48	1.79	—	—	ST32TB301TR-ND	618.75	3K	ST32TG302CT-ND	2.70	1.95	1.95
500	—	ST32TB501CT-ND	2.07	1.50	—	—	—	—	5K	ST32TG502CT-ND	2.48	1.79	1.79
1K	ST32TA102CT-ND	—	2.07	1.50	—	—	—	—	20K	ST32TG203CT-ND	2.48	1.79	1.79
3K	ST32TA302CT-ND	ST32TB302CT-ND	2.48	1.79	—	ST32TA302TR-ND	ST32TB302TR-ND	618.75	50K	ST32TG503CT-ND	2.48	1.79	1.79
30K	ST32TA303CT-ND	ST32TB303CT-ND	2.48	1.79	—	ST32TA303TR-ND	ST32TB303TR-ND	618.75	100K	ST32TG104CT-ND	2.48	1.79	1.79
100K	—	ST32TB104CT-ND	2.07	1.50	—	—	ST32TB104TR-ND	517.50	200K	ST32TG204CT-ND	2.48	1.79	1.79
200K	ST32TA204CT-ND	ST32TB204CT-ND	2.07	1.50	—	ST32TA204TR-ND	ST32TB204TR-ND	517.50	1M	ST32TG105CT-ND	2.48	1.79	1.79
500K	ST32TA504CT-ND	ST32TB504CT-ND	2.07	1.50	—	ST32TA504TR-ND	ST32TB504TR-ND	517.50					

* T&R Denotes Tape and Reel Pricing

Model SM4 Surface Mount 4mm, 12-Turn, Sealed



FEATURES: • Sealed to allow for automatic processing • Stable cermet element • Precious metal contact

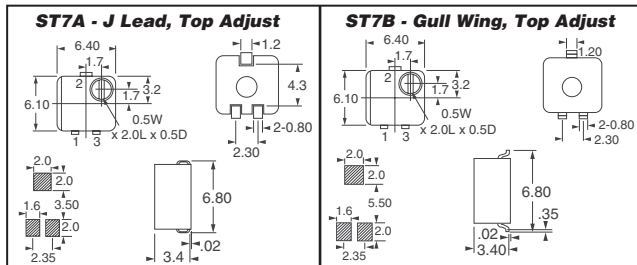
ELECTRICAL: • Resistance Tolerance: $\pm 10\%$ • Maximum Temperature Coefficient: ± 100 ppm/ $^{\circ}$ C • Power Rating: 0.25W at 85°C, 0W at 150°C • Maximum Input Voltage: 300VDC or power rating, whichever is less • Maximum Wiper Current: 100mA or power rating, whichever is less • Maximum End Resistance: 1% or 20, whichever is greater • Contact Resistance Variation: 1% or 30, whichever is greater • Operating Temperature Range: -65°C ~ 150°C • Minimum Insulation Resistance: 1000M Ω at 500VDC • Dielectric Strength: 600VAC, 1 minute

MECHANICAL: • Mechanical Torque: 12 turns • Operating Torque: 20-300 gram-cm • Minimum Stop Strength: Clutch action • Rotational Life: 200 cycles, ($\Delta R/R \leq \pm 3.0 + 3\%$)

Res. (Ω)	Digi-Key Part No.	1	10	100	500
200	SM4W201-ND	3.75	3.25	2.94	2.50

Units Marked with Resistance Code and 2-Digit Date Code

Model ST7 Low Profile, Surface Mount, 7mm Squared Multi-Turn



FEATURES: • Sealed to allow for automatic processing • Precious metal alloy contact

ELECTRICAL: • Resistance Tolerance: $\pm 20\%$ standard • Temperature Coefficient of Resistance: 100 Ω ~ 1M Ω ± 100 ppm/ $^{\circ}$ C, 50 Ω ± 250 ppm/ $^{\circ}$ C • Power Rating: 1/4W at 70°C • Operating Voltage Maximum: 200VDC or power rating, whichever is less • Wiper Current Maximum: 100mA or power rating, whichever is less • Nominal Electrical Angle: 2.5 turns • Electrical Continuity: Continuous over full mechanical range • End Resistance: 1% or 30, whichever is greater • Resolution: Essentially infinite • Contact Resistance Variation: 1% or 30, whichever is greater • Operating Temperature Range: -55°C ~ 125°C • Minimum Insulation Resistance: 1000M Ω at 500VDC for 2 minutes • Dielectric Strength: 500VAC rms, 1 minute, 1 millamp maximum

MECHANICAL: • Nominal Mechanical Angle: 3 turns • Operating Torque: 50 gram-cm maximum (0.70 oz.-in.) • Minimum Stop Strength: N/A, wiper idles • Rotational Life: 100 cycles ($\Delta R/R \leq 2.0 + 3\%$)

Res. (Ω)	Digi-Key Part No.	Digi-Key Part No.	Cut Tape Price Each	1	10	100	Digi-Key Part No.	Digi-Key Part No.	T&R Pricing* 500
1K	—	ST7B102CT-ND	5.33	4.82	4.10	—	—	ST7B102TR-ND	1710.00
2K	—	ST7B202CT-ND	5.33	4.82	4.10	—	—	ST7B202TR-ND	1710.00
5K	ST7A502CT-ND	ST7B502CT-ND	5.33	4.82	4.10	—	—	ST7B502TR-ND	1710.00
20K	ST7A203CT-ND	—	5.33	4.82	4.10	—	ST7A203TR-ND	—	1710.00
50K	ST7A503CT-ND	—	5.33	4.82	4.10	—	—	—	1710.00
100K	ST7A104CT-ND	—	5.33	4.82	4.10	—	—	—	1710.00

Units Marked with Resistance Mark and 1 Digit Date Code.

* T&R Denotes Tape and Reel Pricing.

(Continued)

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

More Product Available Online: www.digkey.com



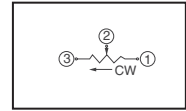
Model CT6 6mm Squared Single Turn

FEATURES: • Sealed to allow for automatic processing • Precious metal alloy contact • Highly automated assembly

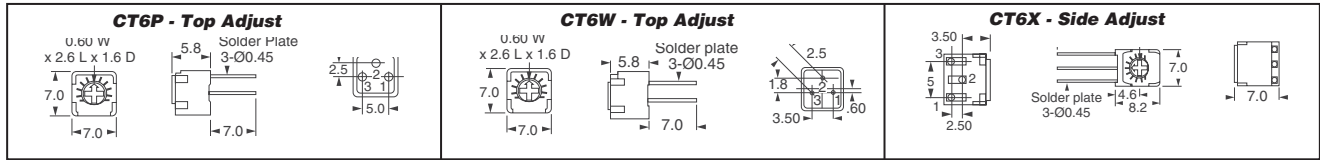
ELECTRICAL: • Resistance Tolerance: ±10% standard • Temperature Coefficient of Resistance: 50Ω ~ 2MΩ ±100 ppm/°C, others ±250 ppm/°C • Power Rating: 1/2W at 70°C • Operating Voltage Maximum: 200VDC or power rating, whichever is less • Wiper Current Maximum: 100mA or power rating, whichever is less • Nominal Electrical Angle: 220° • Electrical Continuity: Continuous over full mechanical range • End Resistance: 1% or 2Ω, whichever is greater • Resolution: Essentially infinite • Contact Resistance Variation: 1%

or 3Ω, whichever is greater • Operating Temperature Range: -55°C ~ 125°C • Minimum Insulation Resistance: 1000MΩ at 500VDC for 2 minutes • Dielectric Strength: 900VAC rms, 1 minute, 1 milliamp maximum

MECHANICAL: • Nominal Mechanical Angle: 260° • Operating Torque: 20-200 gram-cm maximum (0.27- 2.78 oz.-in.) • Minimum Stop Strength: 500 gram-cm (6.94 oz.-in.) • Rotational Life: 200 cycles (▲ R/R ≤ 2Ω + 3%) • Solderability: Mil-Std-202 Method 208 • Minimum Terminal Strength: 1Kg



Dim. in mm



Res. (Ω)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	1	10	Price Each	500	1,000
1K	—	CT6W102-ND	—	.99	.86	.78	.66	.58
5K	CT6P502-ND	—	CT6X502-ND	.84	.73	.66	.56	.49
50K	—	CT6W503-ND	—	.99	.86	.78	.66	.58

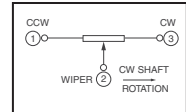
Units Marked with Resistance Mark and 1 Digit Date Code.

Model CT94 9mm Squared Multi-Turn

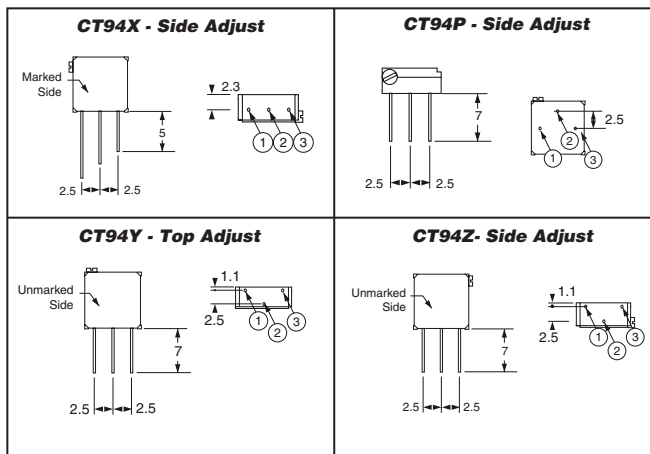
ELECTRICAL: • Resistance Tolerance: ±10% • Temperature Coefficient of Resistance: 50Ω ~ 2MΩ ±100 ppm/°C, others ±250 ppm/°C • Power Rating: 1/2W at 70°C, 0W at 125°C • Operating Voltage Maximum: 300VDC or power rating, whichever is less • Wiper Current Maximum: 100mA or power rating, whichever is less • End Resistance Maximum: 1% or 2Ω, whichever is greater • Contact Resistance Variation: 1% or 3Ω, whichever is greater • Operating Temperature Range: -55°C ~ 125°C • Minimum Insulation Resistance: 1000MΩ

at 500VDC • Dielectric Strength: 900VAC rms, 1 minute • Number of Mechanical Turns: 18 turns

MECHANICAL: • Operating Torque: 357 gram-cm maximum • Mechanical Stop: Clutch action • Minimum Terminal Strength: 1.02Kg • Rotational Life: 200 cycles (▲ R/R ≤ 2Ω + 3%)



Dim. in mm



Res. (Ω)	Digi-Key Part No.	1	10	Price Each	500
50	CT94X500-ND	1.68	1.56	1.41	1.20
200	CT94X201-ND	1.68	1.56	1.41	1.20
20K	CT94X203-ND	1.68	1.56	1.41	1.20
1 Meg	CT94X105-ND	1.68	1.56	1.41	1.20

Res. (Ω)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	1	Price Each	100	500
10	CT94P100-ND	—	CT94Z100-ND	1.68	1.56	1.41	1.20
20	CT94P200-ND	CT94Y200-ND	CT94Z200-ND	1.68	1.56	1.41	1.20
50	CT94P500-ND	CT94Y500-ND	CT94Z500-ND	1.68	1.56	1.41	1.20
100	CT94P101-ND	—	—	1.68	1.56	1.41	1.20
200	—	—	CT94Z201-ND	1.85	1.72	1.56	1.32
500	—	CT94Y501-ND	CT94Z501-ND	1.85	1.72	1.56	1.32
2K	—	—	CT94Z202-ND	1.85	1.72	1.56	1.32
5K	CT94P502-ND	CT94Y502-ND	CT94Z502-ND	1.68	1.56	1.41	1.20
20K	CT94P203-ND	CT94Y203-ND	CT94Z203-ND	1.68	1.56	1.41	1.20
200K	—	—	CT94Z204-ND	1.85	1.72	1.56	1.32
1 Meg	CT94P105-ND	CT94Y105-ND	—	1.68	1.56	1.41	1.20
2 Meg	CT94P205-ND	—	CT94Z205-ND	1.68	1.56	1.41	1.20

Units Marked with Resistance Code and 1 Digit Date Code.

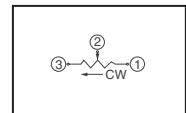
Model CT9 9mm Squared Multi-Turn

FEATURES: • Sealed to withstand board washing • Precious metal contact • Highly automated assembly

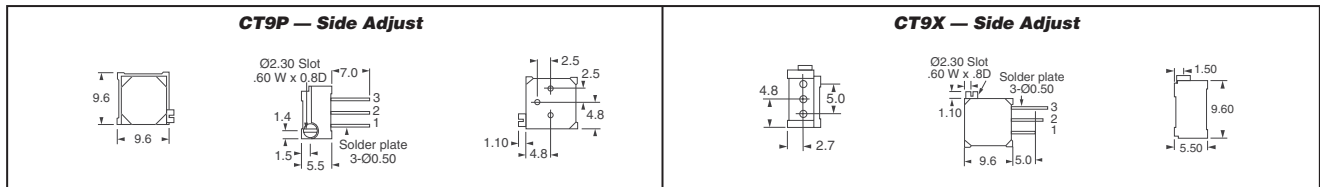
ELECTRICAL: • Resistance Tolerance: ±10% standard • Temperature Coefficient of Resistance: 50Ω ~ 2MΩ ±100 ppm/°C, others ±250 ppm/°C • Power Rating: 1/2W at 70°C • Operating Voltage Maximum: 300VDC or power rating, whichever is less • Wiper Current Maximum: 100mA or power rating, whichever is less • Nominal Electrical Angle: 16 turns • Electrical Continuity: Continuous over full mechanical range • End Resistance: 1% or 2Ω, whichever is greater • Resolution: Essentially infinite • Contact Resistance Variation: 1%

or 3Ω, whichever is greater • Operating Temperature Range: -55°C ~ 125°C • Minimum Insulation Resistance: 1000MΩ at 500VDC for 2 minutes • Dielectric Strength: 900VAC rms, 1 minute, 1 milliamp maximum

MECHANICAL: • Nominal Mechanical Angle: 18 turns • Operating Torque: 360 gram-cm maximum (5 oz.-in.) • Minimum Stop Strength: N/A, wiper idles • Rotational Life: 200 cycles, 10Ω ~ 200Ω, ▲ R/R ≤ ± (0.5Ω + 3%), 500Ω ~ 5MΩ ▲ R/R ≤ ± (0.5Ω + 2%) • Solderability: Mil-Std-202 Method 208 • Minimum Terminal Strength: 1Kg



Dim. in mm



Res. (Ω)	Digi-Key Part No.	Digi-Key Part No.	1	10	Price Each	500	1,000
2K	—	CT9X202-ND	1.65	1.56	1.32	1.23	1.07
100K	CT9P104-ND	CT9X104-ND	1.65	1.56	1.32	1.23	1.07

Units Marked with Resistance Mark and 1 Digit Date Code.

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

More Product Available Online: www.digkey.com

Toll-Free: 1-800-344-4539 • Phone 218-681-6674 • Fax: 218-681-3380

Multi-turn Cermet Trimmer Potentiometers – T93 Series 3/8" Square



FEATURES:

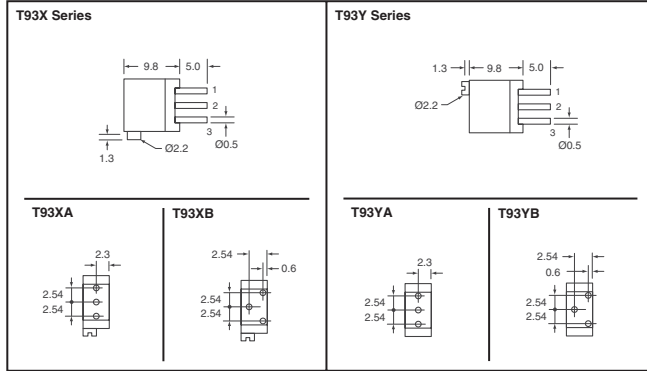
- Industrial Grade • Tests according to CECC 41 000 • Contact resistance variation <1% typical

ELECTRICAL SPECIFICATIONS:

- Resistive Element: Cermet • Electrical Travel: 21 turns • Tolerance (Standard): ±10% • Power Rating (Linear): 0.5W @ 70°C • Limiting Element Voltage (Linear Law): 250V • Contact Resistance Variation: 2% Rn or 2Ω • End Resistance: 1Ω typical • Dielectric Strength (RMS): 1000V • Insulation Resistance (500VDC): 10⁹MΩ

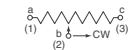
MECHANICAL SPECIFICATIONS:

- Mechanical Travel: 23 turns ±5 • Operating Torque: 1.5Ncm maximum • End Stop Torque: Clutch Action



Resistance (Ω)	Digi-Key Part No.	Digi-Key Part No.	Pricing			
			1	10	50	100
T93XA and T93XB Series						
100	T93XA-100-ND	—	1.25	12.14	57.12	107.10
200	T93XA-200-ND	—	1.25	12.14	57.12	107.10
500	T93XA-500-ND	T93XB-500-ND	1.25	12.14	57.12	107.10
1.0K	T93XA-1.0K-ND	T93XB-1.0K-ND	1.25	12.14	57.12	107.10
2.0K	T93XA-2.0K-ND	T93XB-2.0K-ND	1.25	12.14	57.12	107.10
5.0K	T93XA-5.0K-ND	T93XB-5.0K-ND	1.25	12.14	57.12	107.10
10K	T93XA-10K-ND	T93XB-10K-ND	1.25	12.14	57.12	107.10
20K	T93XA-20K-ND	T93XB-20K-ND	1.25	12.14	57.12	107.10
50K	T93XA-50K-ND	T93XB-50K-ND	1.25	12.14	57.12	107.10
100K	T93XA-100K-ND	T93XB-100K-ND	1.25	12.14	57.12	107.10
T93YA and T93YB Series						
10	T93YA-10-ND	—	1.25	12.14	57.12	107.10
20	T93YA-20-ND	—	1.25	12.14	57.12	107.10
50	T93YA-50-ND	—	1.25	12.14	57.12	107.10
100	T93YA-100-ND	T93YB-100-ND	1.25	12.14	57.12	107.10
200	T93YA-200-ND	T93YB-200-ND	1.25	12.14	57.12	107.10
500	T93YA-500-ND	T93YB-500-ND	1.25	12.14	57.12	107.10
1.0K	T93YA-1.0K-ND	T93YB-1.0K-ND	1.25	12.14	57.12	107.10
2.0K	T93YA-2.0K-ND	T93YB-2.0K-ND	1.25	12.14	57.12	107.10
5.0K	T93YA-5.0K-ND	T93YB-5.0K-ND	1.25	12.14	57.12	107.10
10K	T93YA-10K-ND	T93YB-10K-ND	1.25	12.14	57.12	107.10
20K	T93YA-20K-ND	T93YB-20K-ND	1.25	12.14	57.12	107.10
50K	T93YA-50K-ND	T93YB-50K-ND	1.25	12.14	57.12	107.10
100K	T93YA-100K-ND	T93YB-100K-ND	1.25	12.14	57.12	107.10
200K	T93YA-200K-ND	T93YB-200K-ND	1.25	12.14	57.12	107.10
500K	T93YA-500K-ND	T93YB-500K-ND	1.25	12.14	57.12	107.10
1.0M	T93YA-1.0M-ND	T93YB-1.0M-ND	1.25	12.14	57.12	107.10

Multi-turn Cermet Trimmer Potentiometers – T18 Series 3/4" Rectangular



FEATURES:

- Industrial Grade • MIL-R-22097 • Tests according to CECC 41 000

ELECTRICAL SPECIFICATIONS:

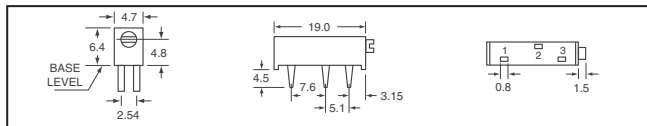
- Resistive Element: Cermet • Electrical Travel: 15 turns ±1 • Tolerance (Standard): ±10% • Power Rating (Linear): 0.25W @ 70°C • Limiting Element Voltage (Linear Law): 250V • Contact Resistance Variation: 2% Rn or 1Ω • End Resistance: 1Ω typical • Dielectric Strength (RMS): 1000V • Insulation Resistance (500VDC): 10⁸MΩ

MECHANICAL SPECIFICATIONS:

- Mechanical Travel: 18 turns ±5 • Operating Torque: 2Ncm maximum • End Stop Torque: Clutch Action • Unit Weight: 1g maximum • Wiper (Actual Travel): Positioned at approximately 50%

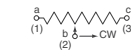
ENVIRONMENTAL SPECIFICATIONS:

- Temperature Range: -55°C ~ 125°C • Climatic Category: 55/125/56 • Sealing: Fully sealed; Container IP67



Resistance (Ω)	Digi-Key Part No.	Pricing			
		1	10	50	100
100	T18-100-ND	1.62	15.84	74.25	132.00
200	T18-200-ND	1.62	15.84	74.25	132.00
500	T18-500-ND	1.62	15.84	74.25	132.00
1.0K	T18-1.0K-ND	1.62	15.84	74.25	132.00
2.0K	T18-2.0K-ND	1.62	15.84	74.25	132.00
5.0K	T18-5.0K-ND	1.62	15.84	74.25	132.00
10K	T18-10K-ND	1.62	15.84	74.25	132.00
20K	T18-20K-ND	1.62	15.84	74.25	132.00
50K	T18-50K-ND	1.62	15.84	74.25	132.00
100K	T18-100K-ND	1.62	15.84	74.25	132.00
200K	T18-200K-ND	1.62	15.84	74.25	132.00
500K	T18-500K-ND	1.62	15.84	74.25	132.00
1.0M	T18-1.0M-ND	1.62	15.84	74.25	132.00

Multi-turn Sealed Container Cermet Trimmer Potentiometers – T63 Series 1/4" Square



FEATURES:

- Industrial Grade • Tests according to CECC 41 000 • Multi-turn operation • Low contact resistance variation 1% typical

ELECTRICAL SPECIFICATIONS:

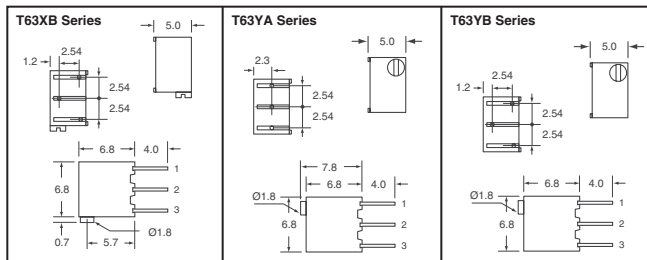
- Resistive Element: Cermet • Electrical Travel: 13 turns ±2 • Tolerance (Standard): ±10% • Power Rating (Linear): 0.25W @ 85°C • Limiting Element Voltage (Linear Law): 250V • Contact Resistance Variation: 2% Rn or 2Ω • End Resistance: 1Ω typical • Dielectric Strength (RMS): 1000V • Insulation Resistance (500VDC): 10⁸MΩ

MECHANICAL SPECIFICATIONS:

- Mechanical Travel: 15 turns ±5 • Operating Torque: 1.5Ncm maximum • End Stop Torque: Clutch Action • Unit Weight: 0.5g maximum • Wiper (Actual Travel): Positioned at approximately 50%

ENVIRONMENTAL SPECIFICATIONS:

- Temperature Range: -55°C ~ 155°C • Climatic Category: 55/125/56 • Sealing: Fully sealed; Container IP67

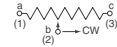


Resistance (Ω)	Digi-Key Part No.	Digi-Key Part No.	Pricing			
			1	10	50	100
T63XB Series						
500	T63XB-500-ND	—	3.34	30.40	144.40	266.00
1.0K	T63XB-1.0K-ND	—	3.34	30.40	144.40	266.00
5.0K	T63XB-5.0K-ND	—	3.34	30.40	144.40	266.00
2.0K	T63XB-2.0K-ND	—	3.34	30.40	144.40	266.00
10K	T63XB-10K-ND	—	3.34	30.40	144.40	266.00
20K	T63XB-20K-ND	—	3.34	30.40	144.40	266.00
50K	T63XB-50K-ND	—	3.34	30.40	144.40	266.00
100K	T63XB-100K-ND	—	3.34	30.40	144.40	266.00
T63YA and T63YB Series						
100	—	T63YB-100-ND	3.34	30.40	144.40	266.00
200	—	T63YB-200-ND	3.34	30.40	144.40	266.00
1.0K	T63YA-1.0K-ND	T63YB-1.0K-ND	3.34	30.40	144.40	266.00
2.0K	—	T63YB-2.0K-ND	3.34	30.40	144.40	266.00
5.0K	—	T63YB-5.0K-ND	3.34	30.40	144.40	266.00
10K	T63YA-10K-ND	T63YB-10K-ND	3.34	30.40	144.40	266.00
20K	—	T63YB-20K-ND	3.34	30.40	144.40	266.00
50K	—	T63YB-50K-ND	3.34	30.40	144.40	266.00
100K	T63YA-100K-ND	T63YB-100K-ND	3.34	30.40	144.40	266.00
200K	—	T63YB-200K-ND	3.34	30.40	144.40	266.00
500K	—	T63YB-500K-ND	3.34	30.40	144.40	266.00
1.0M	—	T63YB-1.0M-ND	3.34	30.40	144.40	266.00

More Product Available Online: www.digikey.com



Single Turn Cermet Trimmer Potentiometers – T7 Series



FEATURES:

- Industrial Grade • Tests according to CECC 41100 • Low temperature coefficient (100ppm/k typical)
- Easy to read scale

ELECTRICAL SPECIFICATIONS:

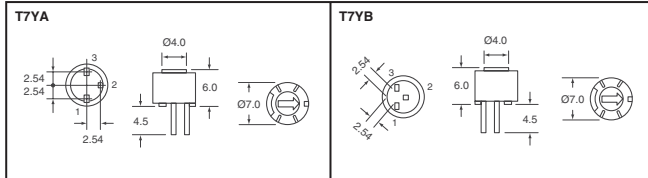
- **Resistive Element:** Cermet • **Electrical Travel:** 270° ±15° • **Tolerance (Standard):** ±20% • **Power Rating (Linear):** 0.5W @ 85°C • **Limiting Element Voltage (Linear Law):** 250V • **Contact Resistance Variation:** 3% or 3Ω • **End Resistance:** 1Ω typical • **Dielectric Strength (RMS):** 1000V • **Insulation Resistance:** 10⁹MΩ

MECHANICAL SPECIFICATIONS:

- **Mechanical Travel:** 300° ±5° • **Operating Torque:** 2Ncm maximum • **End Stop Torque:** 4Ncm maximum
- **Unit Weight:** 0.5g maximum

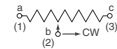
ENVIRONMENTAL SPECIFICATIONS:

- **Temperature Range:** -55°C – 125°C • **Climatic Category:** 55/100/56 • **Sealing:** IP64



Resistance (Ω)	Digi-Key Part No.	Digi-Key Part No.	Pricing			
			1	10	50	100
T7YA and T7YB Series						
100	—	T7YB-100-ND	1.64	14.72	68.67	127.53
220	—	T7YB-220-ND	1.64	14.72	68.67	127.53
470	—	T7YB-470-ND	1.64	14.72	68.67	127.53
1.0K	T7YA-1.0K-ND	T7YB-1.0K-ND	1.64	14.72	68.67	127.53
2.2K	T7YA-2.2K-ND	T7YB-2.2K-ND	1.64	14.72	68.67	127.53
4.7K	T7YA-4.7K-ND	T7YB-4.7K-ND	1.64	14.72	68.67	127.53
10K	T7YA-10K-ND	T7YB-10K-ND	1.64	14.72	68.67	127.53
22K	T7YA-22K-ND	T7YB-22K-ND	1.64	14.72	68.67	127.53
47K	T7YA-47K-ND	T7YB-47K-ND	1.64	14.72	68.67	127.53
100K	T7YA-100K-ND	T7YB-100K-ND	1.64	14.72	68.67	127.53
220K	T7YA-220K-ND	T7YB-220K-ND	1.64	14.72	68.67	127.53
470K	T7YA-470K-ND	T7YB-470K-ND	1.64	14.72	68.67	127.53
1.0M	T7YA-1.0M-ND	T7YB-1.0M-ND	1.64	14.72	68.67	127.53

Single Turn Sealed Cermet Potentiometers – T73 Series 1/4" Square



FEATURES:

- Industrial grade • Fully sealed • Miniature package • Rotor designed for automatic machine adjust interface
- Withstands harsh environments and immersion cleaning process

ELECTRICAL SPECIFICATIONS:

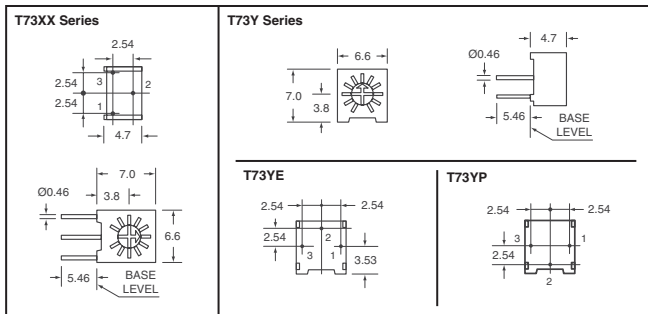
- **Resistive Element:** Cermet • **Electrical Travel:** 240° nominal • **Tolerance (Standard):** ±10% • **Power Rating (Linear):** 0.5W @ 70°C • **Limiting Element Voltage:** 300V • **Contact Resistance Variation:** 1% or 3Ω maximum whichever is greater • **Absolute Minimum Resistance:** 1% or 2Ω maximum whichever is greater • **Adjustability:** ±0.05% voltage, ±0.15% resistance • **Resolution:** Infinite • **Insulation Resistance (500VDC):** 10⁹MΩ • **Dielectric Strength:** 900VAC sea level; 350VAC 80,000 ft.

MECHANICAL SPECIFICATIONS:

- **Mechanical Travel:** 270° • **Operating Torque:** 2.1Ncm maximum • **End Stop Torque:** 4.9Ncm maximum
- **Unit Weight:** 0.6g maximum

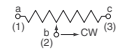
ENVIRONMENTAL SPECIFICATIONS:

- **Temperature Range:** -55°C – 125°C • **Climatic Category:** 55/100/56 • **Sealed Test:** 85°C Fluoriert (Fluoriert is a registered trademark of 3M Co.) • **Flammability:** UL 94-V0



Resistance (Ω)	Digi-Key Part No.	Digi-Key Part No.	Pricing			
			1	10	50	100
T73XX Series						
1.0K	T73XX-1.0K-ND	—	.98	8.82	41.16	76.44
2.0K	T73XX-2.0K-ND	—	.98	8.82	41.16	76.44
5.0K	T73XX-5.0K-ND	—	.98	8.82	41.16	76.44
10K	T73XX-10K-ND	—	.98	8.82	41.16	76.44
20K	T73XX-20K-ND	—	.98	8.82	41.16	76.44
50K	T73XX-50K-ND	—	.98	8.82	41.16	76.44
100K	T73XX-100K-ND	—	.98	8.82	41.16	76.44
200K	T73XX-200K-ND	—	.98	8.82	41.16	76.44
T73YE and T73YP Series						
200	—	T73YP-200-ND	.98	8.82	41.16	76.44
500	T73YE-500-ND	T73YP-500-ND	.98	8.82	41.16	76.44
1.0K	T73YE-1.0K-ND	T73YP-1.0K-ND	.98	8.82	41.16	76.44
2.0K	T73YE-2.0K-ND	T73YP-2.0K-ND	.98	8.82	41.16	76.44
5.0K	T73YE-5.0K-ND	T73YP-5.0K-ND	.98	8.82	41.16	76.44
10K	T73YE-10K-ND	T73YP-10K-ND	.98	8.82	41.16	76.44
20K	T73YE-20K-ND	T73YP-20K-ND	.98	8.82	41.16	76.44
50K	T73YE-50K-ND	T73YP-50K-ND	.98	8.82	41.16	76.44
100K	T73YE-100K-ND	T73YP-100K-ND	.98	8.82	41.16	76.44
200K	—	T73YP-200K-ND	.98	8.82	41.16	76.44
500K	—	T73YP-500K-ND	.98	8.82	41.16	76.44
1.0M	—	T73YP-1.0M-ND	.98	8.82	41.16	76.44

Multi-turn Cermet Fully Sealed Trimmer Potentiometers – TS63Y Series 1/4" Square



FEATURES:

- Industrial grade • Multi-turn operation • Full sealing • Tests according to CECC 41 000

ELECTRICAL SPECIFICATIONS:

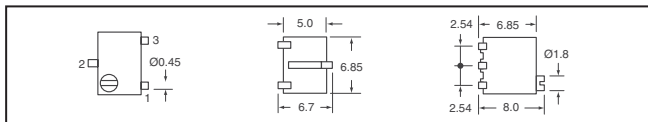
- **Resistive Element:** Cermet • **Electrical Travel:** 13 turns ±2 • **Tolerance (Standard):** ±10% • **Power Rating (Linear):** 0.25W @ 85°C • **Limiting Element Voltage:** 250V • **Contact Resistance Variation:** 2% Rn or 2Ω • **End Resistance:** 1Ω typical • **Dielectric Strength (RMS):** 1000V • **Insulation Resistance:** 10⁹MΩ

MECHANICAL SPECIFICATIONS:

- **Mechanical Travel:** 15 turns ±5 • **Operating Torque:** 1.5Ncm maximum • **End Stop Torque:** Clutch Action
- **Unit Weight:** 0.5g maximum • **Wiper (Actual travel):** Positioned at approximately 50%

ENVIRONMENTAL SPECIFICATIONS:

- **Temperature Range:** -55°C – 155°C • **Climatic Category:** 55/125/56 • **Sealing:** Sealed container, solder immersion IP67



Resistance (Ω)	Digi-Key Part No.	Cut Tape			Digi-Key Part No.	Tape and Reel Pricing 500
		5	10	100		
100	TS63Y-100CT-ND	13.29	23.04	208.21	TS63Y-100TR-ND	722.00
200	TS63Y-200CT-ND	13.29	23.04	208.21	TS63Y-200TR-ND	722.00
500	TS63Y-500CT-ND	13.29	23.04	208.21	TS63Y-500TR-ND	722.00
1.0K	TS63Y-1.0KCT-ND	13.29	23.04	208.21	TS63Y-1.0KTR-ND	722.00
2.0K	TS63Y-2.0KCT-ND	13.29	23.04	208.21	TS63Y-2.0KTR-ND	722.00
5.0K	TS63Y-5.0KCT-ND	13.29	23.04	208.21	TS63Y-5.0KTR-ND	722.00
10K	TS63Y-10KCT-ND	13.29	23.04	208.21	TS63Y-10KTR-ND	722.00
20K	TS63Y-20KCT-ND	13.29	23.04	208.21	TS63Y-20KTR-ND	722.00
50K	TS63Y-50KCT-ND	13.29	23.04	208.21	TS63Y-50KTR-ND	722.00
100K	TS63Y-100KCT-ND	13.29	23.04	208.21	TS63Y-100KTR-ND	722.00
500K	TS63Y-500KCT-ND	13.29	23.04	208.21	TS63Y-500KTR-ND	722.00

More Product Available Online: www.digikey.com

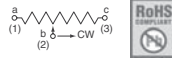
Toll-Free: 1-800-344-4539 • Phone 218-681-6674 • Fax: 218-681-3380

(T083) 1867



Single Turn Sealed Cermet Trimmer Potentiometers

TS53Y Series 4mm



FEATURES:

- Small size for optimum packing density • Suitable for both manual or automatic operation

ELECTRICAL SPECIFICATIONS:

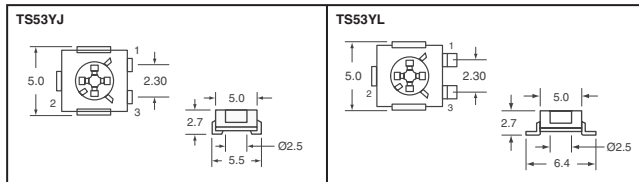
- Resistive Element: Cermet • Electrical Travel: 220° ±15° • Tolerance (Standard): ±20% • Power Rating (Linear): 0.25W @ 70°C • Limiting Element Voltage: 200V • Contact Resistance Variation: 1% or 3Ω • End Resistance: 0.1% or 3Ω typical • Dielectric Strength (RMS): 1000V • Insulation Resistance: 10⁹MΩ

MECHANICAL SPECIFICATIONS:

- Mechanical Travel: 270° ±10° • Operating Torque: 1.5Ncm maximum • End Stop Torque: 3.5Ncm maximum • Unit Weight: 0.15g maximum

ENVIRONMENTAL SPECIFICATIONS:

- Temperature Range: -55°C - 125°C • Climatic Category: 55/125/56 • Sealing: Sealed container



Resistance (Ω)	Digi-Key Part No.	Digi-Key Part No.	Cut Tape Pricing			Tape and Reel Pricing
			5	10	100	
TS53YJ and TS53YL Series						
100	—	TS53YL-100CT-ND	4.89	8.48	76.61	265.50
200	TS53YJ-200CT-ND	TS53YL-200CT-ND	4.89	8.48	76.61	265.50
500	TS53YJ-500CT-ND	TS53YL-500CT-ND	4.89	8.48	76.61	265.50
1.0K	TS53YJ-1.0KCT-ND	TS53YL-1.0KCT-ND	4.89	8.48	76.61	265.50
2.0K	TS53YJ-2.0KCT-ND	TS53YL-2.0KCT-ND	4.89	8.48	76.61	265.50
5.0K	TS53YJ-5.0KCT-ND	TS53YL-5.0KCT-ND	4.89	8.48	76.61	265.50
10K	TS53YJ-10KCT-ND	TS53YL-10KCT-ND	4.89	8.48	76.61	265.50
20K	TS53YJ-20KCT-ND	TS53YL-20KCT-ND	4.89	8.48	76.61	265.50
50K	TS53YJ-50KCT-ND	TS53YL-50KCT-ND	4.89	8.48	76.61	265.50
100K	TS53YJ-100KCT-ND	TS53YL-100KCT-ND	4.89	8.48	76.61	265.50
200K	TS53YJ-200KCT-ND	TS53YL-200KCT-ND	4.89	8.48	76.61	265.50
500K	TS53YJ-500KCT-ND	TS53YL-500KCT-ND	4.89	8.48	76.61	265.50

† For Tape and Reel part number, change CT-ND to TR-ND.

VISHAY Spectrol Cermet Trimmers

064 Series, 3/8" Square (10mm) Multi-Turn

- Electrical Specifications: • Electrical Travel: 21 turns ±2 • Tolerance: Standard, ±10% • Power Rating: Linear, 0.5W at +70°C • Limiting Element Voltage (Linear Law): 250V • Contact Resistance Variation: 2% Rn or 2Ω • End Resistance (Typical): 1Ω • Dielectric Strength (RMS): 1000V • Insulation Resistance (500 VDC) 10⁹MΩ

- Features: • Industrial Grade • Tests according to CECC 41 000

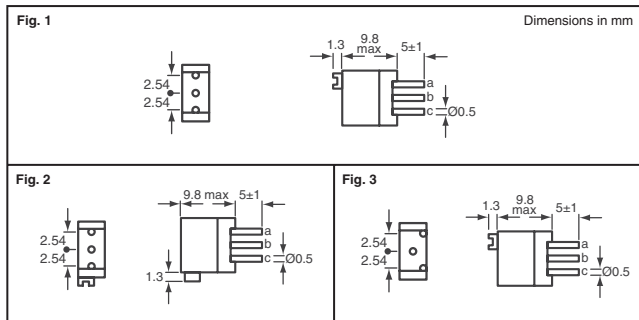


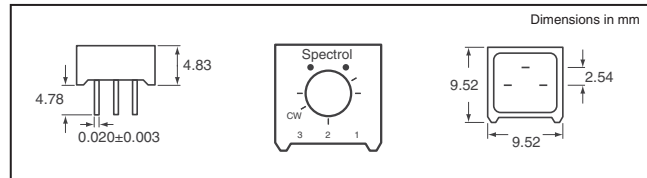
Fig.	Ω	Digi-Key Part No.	Price Each			Vishay Part No.
			1	25	50	
1	500	SP064W-500-ND	1.44	1.40	1.15	064W501
	1.0K	SP064W-1.0K-ND	1.44	1.40	1.15	064W102
	2.0K	SP064W-2.0K-ND	1.44	1.40	1.15	064W202
	5.0K	SP064W-5.0K-ND	1.44	1.40	1.15	064W502
	10K	SP064W-10K-ND	1.44	1.40	1.15	064W103
	20K	SP064W-20K-ND	1.44	1.40	1.15	064W203
	50K	SP064W-50K-ND	1.44	1.40	1.15	064W503
	100K	SP064W-100K-ND	1.44	1.40	1.15	064W104
	200K	SP064W-200K-ND	1.44	1.40	1.15	064W204

Fig.	Ω	Digi-Key Part No.	Price Each			Vishay Part No.
			1	25	50	
2	1.0K	SP064X-1.0K-ND	1.44	1.40	1.15	064X102
	5.0K	SP064X-5.0K-ND	1.44	1.40	1.15	064X502
	10K	SP064X-10K-ND	1.44	1.40	1.15	064X103
	100K	SP064X-100K-ND	1.44	1.40	1.15	064X104
3	1.0K	SP064Y-1.0K-ND	1.44	1.40	1.15	064Y102
	5.0K	SP064Y-5.0K-ND	1.44	1.40	1.15	064Y502
	10K	SP064Y-10K-ND	1.44	1.40	1.15	064Y103
	100K	SP064Y-100K-ND	1.44	1.40	1.15	064Y104

063 Series, 3/8" Square (10mm) Single-Turn

- Electrical Specifications: • Effective Travel: 270° Nominal • Resistance Tolerance: ±10% • End Resistance: 2Ω or 1%, whichever is greater • Temperature Coefficient of Resistance: 100 ppm/°C, 100Ω thru to 2MΩ, 0 to 250 ppm/°C below 100Ω • Power Rating: 0.5W at 70°C derated linearly to 0W at 125°C, Maximum Voltage not to exceed 300V • Dielectric Withstanding Voltage: 1000VAC at sea level, 250VAC at 80,000 feet (24,000 meters) • Insulation Resistance (500 VDC): 1000MΩ minimum • Contact Resistance Variation: 1% or 1Ω, whichever is greater

- Features: • Arrow and graduations for repeatable settings • "O" ring seal for solvent and aqueous washing • I.C. style pins for easy PCB assembly • Rigid board mounting achieved with pins secured in housing • Solder plated terminals for Good Solderability • High temperature soldered terminations for high reliability • Multi-finger wiper for better contact resistance • Solid end stop • Flame retardant housing to UL rated V0

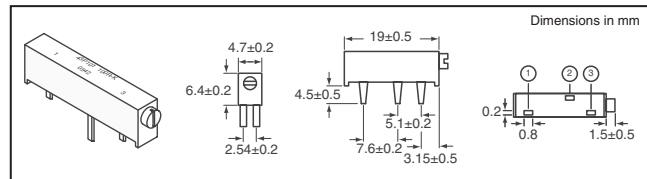


Ω	Digi-Key Part No.	Price Each			Vishay Part No.
		1	25	50	
1.0K	SP063-1.0K-ND	1.55	1.53	1.25	063P102
2.0K	SP063-2.0K-ND	1.55	1.53	1.25	063P202
5.0K	SP063-5.0K-ND	1.55	1.53	1.25	063P502
10K	SP063-10K-ND	1.55	1.53	1.25	063P103
20K	SP063-20K-ND	1.55	1.53	1.25	063P203
50K	SP063-50K-ND	1.55	1.53	1.25	063P503
100K	SP063-100K-ND	1.55	1.53	1.25	063P104
200K	SP063-200K-ND	1.55	1.53	1.25	063P204

043 Series, 3/4" Rectangular (19mm) Multi-Turn

- Electrical Specifications: • Electrical Travel: 15 turns ±1 • Tolerance: ±10% • Power Rating: 0.50W at +70°C • Limiting Element Voltage (Linear Law): 250V • Contact Resistance Variation: 2% Rn or 1Ω • End Resistance (Typical): 1Ω • Dielectric Strength (RMS): 1000V • Insulation Resistance (500VDC): 10⁹MΩ

- Features: • Chevron shaft for sealing and smooth consistent torque • Solder terminations for improved reliability • Multi-finger wiper for better C.R.V.

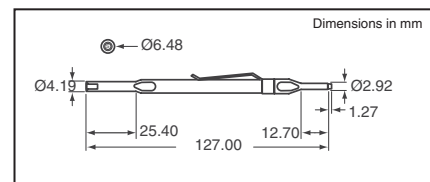


Ω	Digi-Key Part No.	Price Each			Vishay Part No.
		1	25	50	
1.0K	SP043-1.0K-ND	1.42	1.34	1.20	043P102
2.0K	SP043-2.0K-ND	1.42	1.34	1.20	043P202
5.0K	SP043-5.0K-ND	1.42	1.34	1.20	043P502
10K	SP043-10K-ND	1.42	1.34	1.20	043P103
20K	SP043-20K-ND	1.42	1.34	1.20	043P203
50K	SP043-50K-ND	1.42	1.34	1.20	043P503
100K	SP043-100K-ND	1.42	1.34	1.20	043P104
200K	SP043-200K-ND	1.42	1.34	1.20	043P204

Trimmer Adjustment Tool

- Mechanical Specifications: Material: Glass filled nylon body with corrosion resistant stainless steel blades

- Features: • Extended, as well as recessed blade for critical adjustments • Designed to adjust trimmers of all sizes



Digi-Key Part No.	Price Each				Vishay Part No.
	1	25	50	100	
SPTOOL-ND	1.27	1.18	1.09	1.01	008T000

More Product Available Online: www.digikey.com