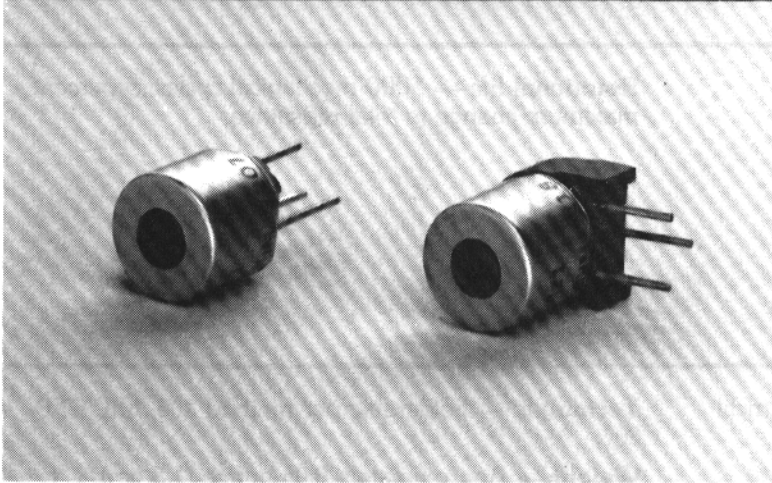


Type S
**Cermet Trimming
Potentiometers**



Features _____

- Typical TCR < 35ppm/°C
- 1000 Mechanical Cycles
- Immersion Sealed
- ±5% Tolerance Available

Benefits _____

- Temperature Stable
- Long Rotational Life
- Washable
- Precision Resistance Value

AVAILABILITY

Groupings _____

The Type S Cermet Trimming Potentiometers are available as follows.

OEM standard components—These OEM components (Resistance Value listed in the table on Page 282) are stocked as components at our manufacturing facilities. They offer a wider range of possible combinations than

the distributor stocked final assemblies but do require assembly.

All custom components—All other components listed are available. Since they are not stocked, they require **both** fabrication and assembly.

General _____

Temperature range — -65°C to +150°C.

Total resistance range — 50 ohms to 1 Megohm.

Total resistance tolerances — ±10 percent standard. ±5% available on request.

Taper — Standard linear.

End resistance — Less than 5 ohms at both ends.

Electrical

Power — 0.5 watt at +85°C, derate to zero at +150°C.

Power derating — Linearly with actuator position for rheostat usage.

Voltage — 300 volts RMS maximum within power rating limits.

Dielectric withstanding voltage — 750 volts at sea level for one second.

Insulation resistance — 1000 megohms minimum.

Operational

Contact resistance variation — Typically less than 3 percent of total resistance or 3 ohms, whichever is greater.

Load life — 1000 hours at +85°C, 3 percent maximum change in total resistance.

Rotational life — 1000 mechanical cycles, 5 percent maximum change in total resistance.

Mechanical

Rotation — Mechanical rotation is 280° ±10°. Electrical rotation is 240° nominal.

Turning torque — 0.5 to 6.0 inch-ounces (0,036 to 0,44 kgf-cm).

Stop torque — 25 inch-ounces (1,8 kgf-cm) minimum.

Construction — Immersion sealed per MIL-R-22097.

Terminals — Solderable per method 208, MIL-STD-202.

Weight — Approximately 0.05 ounce (1,3 gm).

Marking — Clarostat part number and nominal total resistance are marked in two lines. Other marking possible, limited to a maximum of 13 characters in each of two lines. "Type S" always included.

Environmental

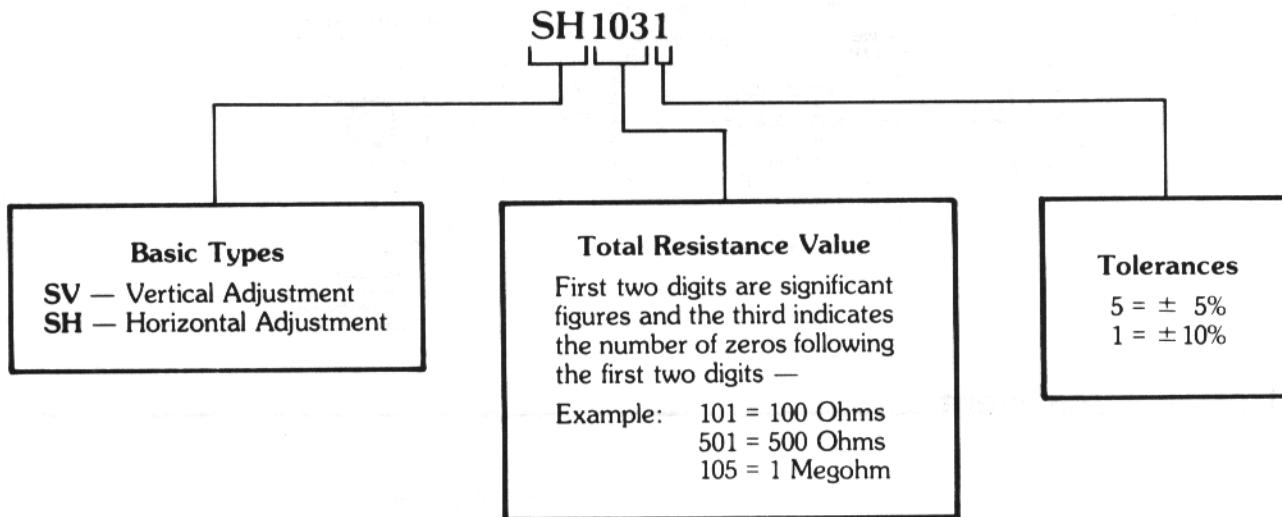
Washability — Type S trimmers will withstand typical after-solder boardwash processes using approved detergent or solvent solutions.

PARAMETER	MAXIMUM CHANGE	TEST METHOD
Vibration	2% Total Resistance 2% Setting Stability	Method 204, Cond. D, MIL-STD-202
Shock	2% Total Resistance 2% Setting Stability	Method 213, Cond. I, MIL-STD-202
Moisture Resistance	2% Total Resistance	Method 106, MIL-STD-202
Corrosion Resistance	96 Hour Test	Method 101, MIL-STD-202 (200 Hrs.)
Effect of Soldering	1% Total Resistance	MIL-R-22097 (5 Sec., 0.062 Inch)
High Temperature Exposure	3% Total Resistance	MIL-R-22097 (1000 Hrs. at 150°C)
Low Temperature Operation	2% Total Resistance	MIL-R-22097 (- 65°C)
Thermal Shock	3% Total Resistance	Method 107, MIL-STD-202
Temperature Coefficient	±35 ppm/°C Typical ±70 ppm/°C Max. ≥ 500 ohms ±100 ppm/°C Max. < 500 ohms	Method 304, MIL-STD-202

Note: Unless otherwise specified, Terms, Definitions, and Test Procedures are in accordance with Variable Resistive Components Institute Standards vrci-t-110 and vrci-t-215.

Cermet Trimming Potentiometers

Explanation of Part Numbers



Available Special Order Number Values

Basic Type	Resistance (ohms)	Code	SV, SH	
			"U" Taper	
			10%	5%
	100	101	—	—
	1000	102	—	—
	10000	103	—	—
	100000	104	—	—
	1000000	105	—	—
	200	201	—	—
	2000	202	—	—
	20000	203	—	—
	200000	204	—	—
	250	251	—	—
	2500	252	—	—
	25000	253	—	—
	250000	254	—	—
	50	500	—	—
	500	501	—	—
	5000	502	—	—
	50000	503	—	—
	500000	504	—	—
	750	751	—	—
	7500	752	—	—
	75000	753	—	—
	750000	754	—	—

Available Catalog Order Number Values

Basic Type	Resistance (ohms)	Code	SV, SH	
			"U" Taper 10%	
			SH	SV
	100	101	—	—
	1000	102	—	—
	10000	103	—	—
	100000	104	—	—
	1000000	105	—	—
	200	201	—	—
	2000	202	—	—
	20000	203	—	—
	200000	204	—	—
	250	251	—	—
	2500	252	—	—
	25000	253	—	—
	250000	254	—	—
	50	500	—	—
	500	501	—	—
	5000	502	—	—
	50000	503	—	—
	500000	504	—	—
	75	750	—	—
	750	751	—	—
	7500	752	—	—
	75000	753	—	—
	750000	754	—	—

— = Available as a Special Order only. Contact factory for information.

