



800-227-0075

<http://www.vimex.com>

# Product Specification

## Electrical

Standard Resistance Range	:	Linear (A) Taper	$100\Omega \leq R_n \leq 5M\Omega$
		Log (B) & Antilog (C) Tapers	$1K\Omega \leq R_n \leq 2.2M\Omega$
Resistance Tolerance <i>(others available on request)</i>	:		$100\Omega \sim 1M\Omega \pm 20$ $>1M\Omega \sim 5M\Omega \pm 30$ $R_n > 5M\Omega +50\% -30\%$
Variation laws	:		Linear (A), Log (B), Antilog (C) <i>(Other tapers available on request)</i>
Residual resistance	:		$\leq 5 \cdot 10^{-3} \cdot R_n$ (2 $\Omega$ minimum value)
Contact resistance variation (dynamic)	:		$\leq 3\% R_n$
Contact resistance variation (static)	:		$\leq 5\% R_n$
Max. Power dissipation @40°C	:	Linear (A) Taper	0.15W
		Log (B) & Antilog (C) Tapers	0.10W
Max. Voltage @40°C	:	Linear (A) Taper	200VDC
		Log (B) & Antilog (C) Tapers	150VDC
Operating Temperature	:		-25°C ~ +70°C
Temperature coefficient	:		$100\Omega \sim 10K\Omega \rightarrow +200/-300$ ppm $>10K\Omega \sim 5M\Omega \rightarrow +200/-500$ ppm

## Mechanical

Resistive element	:	Carbon technology
Angle of rotation (mechanical)	:	240°±5°
Wiper position	:	Middle position: 50%±15°
Angle of rotation (electrical)	:	220°±20°
Stop torque	:	5 Ncm
Push/Pull on Rotor	:	40 N
Wiper torque	:	<2 Ncm <i>(0.4...3.5 Ncm for pots with detents)</i>
Mechanical Life	:	1,000 cycles <i>(more available on request)</i> (up to 10,000 cycles for pots with detents)
Degree of protection	:	IP5 (dust-proof)

				Description:	General specifications for Carbon Trimmer potentiometers.
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## Environmental

Test	Condition	Typical variation of nominal resistance
Damp heat	500 hours @40°C and 95% RH	+5% / -2%
Thermal cycles	16hours @85°C   2hours @-25°C	±2.5%
Temperature coefficient	-25°C ~ +70°C	100Ω ~ 10KΩ → +200/-300 ppm >10KΩ ~ 5MΩ → +200/-500 ppm
Load life	1,000 hours @40°C	+0% / -5%
Mechanical life	1,000 cycles @10 c.p.m.	±3%
Soldering effect	2 seconds @350°C	±1%
Storage (3 years)	@23°C±2°C	±3%

*Unless noted, all specifications are stated based on conditions of 23°C±2°C and 50%±25% RH*

*All features and specifications are standard. Other specifications can always be studied upon request.*

## Standard Resistance Values

Resistance (Ohms)	Resistance Code	Resistance (Ohms)	Resistance Code
100	100	25,000	25K
200	200	47,000	47K
220	220	50,000	50K
250	250	100,000	100K
470	470	200,000	200K
500	500	220,000	220K
1,000	1K	250,000	250K
2,000	2K	470,000	470K
2,200	2K2	500,000	500K
2,500	2K5	1,000,000	1M
4,700	4K7	2,000,000	2M
5,000	5K	2,500,000	2M5
10,000	10K	4,700,000	4M7
20,000	20K	5,000,000	5M
22,000	22K		

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# RoHS Product Specification

Part/Material (name)	CA9 series trimmer
Part/Material (No.)	
Weight (g):	0.73

Material Description	Ingredients substance Description	Substance CAS No.	Amount of substance %	Amount of material %
Housing	PA66	32131-17-2	22.05%	31.50%
	Glass		9.45%	
Terminals	Copper alloy (Cu)	7440-50-8	14.31%	23.02%
	Copper alloy (Zn)	7440-88-8	8.40%	
	Sn	7440-31-5	0.31%	
Collector	Copper alloy (Cu)	7440-50-8	18.39%	29.58%
	Copper alloy (Zn)	7440-88-8	10.80%	
	Sn	7440-31-5	0.39%	
Wiper	Copper alloy (Cu)	7440-50-8	5.79%	6.58%
	Copper alloy (Zn)	7440-88-8	0.59%	
	Sn	7440-31-5	0.20%	
Rotor	PA66	32131-17-2	6.16%	6.16%
Resistor	PET		2.23%	2.74%
	Silver	7440-22-4	0.51%	
Grease	Polyglycol		0.41%	0.41%

Description:		Declaration of Components, Materials and Constituents.	
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