

Product Selector Guide



Carbon Composition Rotary Variable Resistors / Potentiometers

Series and Frame size	Picture	Typical applications	Power Rating	Resistance Range	Tolerance	Rotation/Travel
450 series 24 mm		Dimmers Musical instruments Industrial controls Optional switches	0.50 watt thru 100K 0.33 watt above 100K @ 55°C	100 Ω thru 10 MΩ	± 10% ± 20% ± 30%	300° ± 5° 320° ± 5° with switch
295 series 24 mm		Joystick Gaming controls 1 million life cycles	0.33 watt thru 100K 0.25 watt above 100K 0.167 watt joystick @ 55°C	10 KΩ thru 1 MΩ	± 10% ± 20% ± 30%	Mech: 300° ± 5° Joystick effective rotation = 50°
280 series 16 mm		Audio / Video Computer peripherals	0.25 watt thru 10K 0.125 watt above 10K @ 55°C	500 Ω thru 5 MΩ	± 10% ± 20% ± 30%	300° ± 5°
280 series 16 mm No Shaft		Appliance Function Selector Position Sensor Switch Alternative	0.25 watt thru 10K 0.125 watt above 10K @ 55°C	1000 Ω thru 1 MΩ	± 10% ± 20% ± 30%	340° effective, 360° Mech. Continuous Rotation
270 series 16 mm		Audio Dimmers Optional switches	0.25 watt thru 100 K 0.20 watt above 10K @ 55°C	100 Ω thru 5 MΩ	± 10% ± 20% ± 30%	300° ± 5° 315° ± 5° with switch
296 series 12 mm		Audio / Video Computer peripherals	0.15 watt linear curve 0.10 watt audio curve @ 50°C	500 Ω thru 1 MΩ	± 10% ± 20% ± 30%	300° ± 5°
296 series with bushing 12 mm		Audio / Video Computer peripherals	0.05 watt @ 50°C	500 Ω linear 2 KΩ audio thru 1 MΩ	± 10% ± 20% ± 30%	300° ± 5°
250 series 9 mm		Audio / Video Computer peripherals	0.05 watt @ 50°C	500 Ω thru 1 MΩ	± 10% ± 20% ± 30%	280° ± 5°
251 series 9 mm		Joystick Gaming controls 1 million life cycles	0.01 watt @ 50°C	10 KΩ thru 200 KΩ	± 10% ± 20% ± 30%	Mech: 180° Eff: 38°, 40° 50°, 60°, 70° 80°, 90°, 110°



Conductive Plastic Precision Potentiometer

282 series 16 mm		Industrial Controls Position Sensor Medical Instrumentation HVAC IP54, IP67	0.05 watt @ 70°C	5 KΩ thru 500KΩ Linear, 25KΩ thru 100KΩ Audio	± 10% ± 20% ± 30%	Up to 340° effective, 360° Mech. Continuous Rotation
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All products are RoHS / REACHCompliant

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Series and Frame size	Picture	Typical applications	Power Rating	Resistance Range	Tolerance	Rotation/Travel
442 series Slide		Musical instruments Equalizers Closed Frame	0.25 watt @ 55°C	200 Ω thru 5 MΩ	± 10% ± 20% ± 30%	31.7 mm
448 series Slide		Telephone Automotive Dimmer/Fan control Open frame	Power is travel & taper dependent 0.05 watt to 0.50 watt	500 Ω thru 1 MΩ	± 10% ± 20% ± 30%	10 mm, 15 mm 20 mm, 30 mm 45 mm, 60 mm

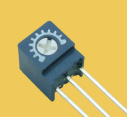
Wire Wound Variable Resistors/Potentiometers

026 series 24 mm		Industrial controls High power Optional switches	5 watts @ 25°C 4 watts @ 55°C	1 Ω thru 25 KΩ	± 10% ± 20% specials available	300° ± 5°
118 series 19 mm		Industrial controls High power	2 watts @ 55°C	1 Ω thru 20 KΩ	± 10% ± 20%	270° ± 5°
115 series 19 mm		HVAC Industrial Trimmer	2 watts @ 55°C	1 Ω thru 20 KΩ	± 5% ± 10% ± 20%	270° ± 5°

Carbon Composition Trimmer Potentiometers

201 series 15 mm		PCB assemblies	0.2 watt below 5K 0.25 watt above 5K @ 55°C	100 Ω thru 5 MΩ	± 10% ± 20% ± 30%	260° ± 5°
262 series 10 mm		PCB assemblies	0.15 watts @ 40°C	500 Ω thru 2 MΩ	± 10% ± 20% ± 30%	265° ± 5°

Cermet Trimmer Potentiometers

306 series 6 mm		PCB assemblies	0.5 watts @ 70°C	10 Ω thru 2 MΩ	± 20%	240° ± 10°
307 series 6 mm		PCB assemblies	0.3 watts @ 70°C	100 Ω thru 1 MΩ	± 25%	240° ± 10°

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Encoders

Series and Frame size	Picture	Typical applications	Voltage Rating	Codes Available	Detents	Rotational life
288 series 16 mm		Audio / Video Volume Controls Optional switch	20 VDC @ 5 mA	2 Bit Binary 4 Bit Gray 4 Bit Hex	16 optional	Continuous Rotation 50,000 cycles*
290 series 9 mm		Audio / Video Volume Controls Optional switch	12 VDC @ 10 mA	2 Bit Binary	20 optional	Continuous Rotation 50,000 cycles*

* 100K cycles available - consult factory

Mini-joystick Controllers

Series and Dimensions	Picture	Typical applications	Power Rating	Resistance Range	Tolerance	Rotational Life / Rotational Angle
252 series Mini-joystick Long Life 21x20x13 mm		Long Life Cursor Control Gaming Joystick Optional Momentary Switch	0.0125 watts @ 50 °C	10,000 Ω thru 200,000 Ω	$\pm 10\%$ $\pm 20\%$ $\pm 30\%$	1,000,000 Cycles / 53° Mechanical
253 series Half-height Mini-joystick Long Life 20x18x6 mm		Long Life Cursor Control Gaming Joystick Optional Momentary Switch	0.0125 watts @ 50 °C	10,000 Ω thru 200,000 Ω	$\pm 10\%$ $\pm 20\%$ $\pm 30\%$	1,000,000 Cycles / 54° Mechanical
254 series Ultra-miniature Joystick Long Life 11x11x5 mm		Long Life Handheld Electronics Cursor/Game Controls Joystick Remote Controls Optional Momentary Switch	0.0125 watts @ 50 °C	10,000 Ω thru 100,000 Ω	$\pm 20\%$ $\pm 30\%$	1,000,000 Cycles / 55° max. Mechanical

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