



CARBON – CA6 🕅

6mm carbon potentiometers with plastic housing and Ingress Protection rating type IP 54 (high level of protection against dust and also against water splashing), according to IEC 60529. Plastic materials can be self-extinguishable according to UL 94 V-0 under request.

Through-hole and SMD configurations are available. Terminals and collector are normally manufactured in tinned brass, although versions with steel terminals are also available under request. Terminals for through-hole models can be provided straight or crimped, which helps hold the component to the PCB during soldering.

Tapers can be linear, log and antilog; special tapers can also be studied.

ACP's potentiometers can be adjusted from either the front or the back, both in the horizontal and the vertical adjustment types. Thumbwheels and shafts can be ordered either separately or already inserted in the potentiometer.

Potentiometers can be manufactured in a wide range of possibilities regarding:

- Resistance value.
- Tolerance.
- Tapers / variation laws.
- Pitch.
- Positioning of the wiper (standard is at 50% rotation).
- Housing and rotor color.
- Mechanical life.
- Self-extinguishable plastic parts according to UL 94 V-0 under request.

Applications

6mm potentiometers are mainly used in trimming applications, in different markets:

- Industrial: Timers and relays, dimmers, adjustment of output.
- Electronic appliances: volume regulation, temperature controls and function selection.
- Automotive: Lighting regulation, dimmers.
- Measurement and test equipment.
- Telecommunication equipment (antenna amplifiers and receivers, videocomm, intercomm).
- Alarm systems.

CA6 🕅 HOW TO ORDER

EXAMPLE: CA6XV2,5-10KA2020 SNP PI WT-6030-BA

Standard feat	ures						Extra feat	ures				Assemb	led acce	essory	
Series Rotor	Model	Packg.	Ohm value	Taper	Tol.	Life	Track	Snap in	Housing	Rotor	Wiper	Assembly	Ref #	Color	Flam.
1 2	3	4	5	6	7	8	9	10	11	12	13		14		
CA6 X	V2,5		- 10K	А	2020			SNP			PI	WT	-6030	-BA	
andard config	uration:			c	CA6 Thi	rough-h	ole				C.	A6 SMD			
mensions:									6mm						
otection:							On requ		54 (dust-proof) inguishable, to		V-0				
ibstrate:					Carbon	technolo					technology, s	special for h	nigh temp	perature	
olor:				Blue	e housin	g + whit	e rotor				Brown hou	using + grey	y rotor		
ackaging:								Bulk	or Tape & Re	el					
/iper position:								é	at 50% ±15°						
erminals:				Snap in	P (exce	pt mode	el CA6VS5)								
arking:							Resistive \	alue marke	d on housing.	Others on re	quest.				
CA6								SNAF	Ferminals P IN P er tip of termina	al, TPXX, whe	ere XX is tip le	ength (under r	request)		SNP , ex: TP2
- Rotors								_							
		M			Ν				Housing						
								Color	: For colors othe	er than standa	ra: -See color	chart below	- CJ	-color, ex	., red: CJ
- Model and pit								_							-
		′5 V:	S5 VSN		VESN request, not	MD readily availa	VSMD WT.	<u>12 - I</u>	Rotor						
		′5 V:	S5 VSN					_ 12-1	Rotor : For colors othe	er than standa	rd: -See color	chart below	- RT-	-color; ex	., blue: RT
2,5 HSMD \			S5 VSN	(Under i			ble)	Color * Seli	: For colors othe	ble property	, V0, for ho	using and	rotor:	-	
		Tre		(Under i		readily availa	^{ble)} nodels	Color * Self By de For ca	: For colors othe f-extinguishal fault, carbon is r arbon: self-exting	ble property non self-exting guishable prop	, V0, for ho uishable, cern erty can be a	using and net is Self-ex dded. V0 me	rotor: tinguishal	ole:	(blank) V0
2,5 HSMD \	′2,5 ∨	Tro (I	ough-hol	(Under i		sMD n	nodels k) ⁽¹⁾	Color Selt By de For ca and ro	: For colors othe f-extinguishal fault, carbon is r	ble property non self-exting guishable prop	, V0, for ho uishable, cern erty can be a	using and net is Self-ex dded. V0 me	rotor: tinguishal	ole:	(blank) V0
2,5 HSMD \ - Packaging	'2,5 V ' reel)	Tro (I	ough-hol e blank) ⁽¹⁾	(Under i		sMD n (blanl	hodels k) ⁽¹⁾	Color Selt By de For ca and ro	: For colors othe f-extinguishal fault, carbon is r arbon: self-exting otor are V0. If on	ble property non self-exting guishable prop	, V0, for ho uishable, cern erty can be a	using and net is Self-ex dded. V0 me	rotor: tinguishal	ole:	(blank) V0
2,5 HSMD \ - Packaging ulk &R (Tape and 13	'2,5 V ' reel) ' reel)	Tr e (1	blank) ⁽¹⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾	e	request, not	sMD n (blan) T8 T&F	nodels k) ⁽¹⁾ kR R15	Color Sel: By de For ca and rc If only	: For colors othe f-extinguishal fault, carbon is r arbon: self-exting otor are V0. If on	ble property non self-exting guishable prop	, V0, for ho uishable, cern erty can be a	using and net is Self-ex dded. V0 me	rotor: tinguishal	ole:	(blank) V0
2,5 HSMD A - Packaging ulk &R (Tape and 13 &R (Tape and 15'	'2,5 V ' reel) ' reel)	Tr e (1	blank) ⁽¹⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾	e	request, not	sMD n (blan) T8 T&F	nodels k) ⁽¹⁾ kR R15	Color Seli By de For ca and rc If only	For colors othe f-extinguishal fault, carbon is r arbon: self-exting otor are V0. If on rotor: RT-V0	ble property non self-exting juishable prop ly the housing	y, V0, for ho uishable, cern erty can be ac needs to be \	using and net is Self-ex dded. V0 me	rotor: tinguishal	ole: ing C	(blank) V0
2,5 HSMD A Packaging UIk R(Tape and 13 R(Tape and 15 If blank, bulk packaging - Resistance value	(2,5 V ' reel) ' reel) is implied. (2) alue	Trr (I	blank) ⁽¹⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾	(Under r	packaging is	SMD n (blan) T& T&F s only availa	holes holes k) ⁽¹⁾ R 15 ble for SMD termina	Color Color Syde For ca and rc If only	For colors othe f-extinguishal fault, carbon is rrbon: self-exting tor are V0. If on rotor: RT-V0	ble property non self-exting juishable prop ly the housing	y, V0, for ho uishable, cern erty can be ac needs to be \	using and net is Self-ex dded. V0 me	rotor: tinguishal	ole: ing C	V0 J-V0, RT
2,5 HSMD Packaging Jlk R (Tape and 13 R (Tape and 15 H blank, bulk packaging Resistance va 0Ω 200Ω 220Ω 2	'2,5 V ' reel) ' reel) is implied. (2) blue 50Ω 470Ω	Τrr ((Ν.Α., Not A 500Ω 1	Dugh-hol blank) ⁽¹⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾	(Under r	packaging is	SMD n (blan) T& T&F s only availa	bleb nodels k)(1)	Color * Selt For ca and rc If only If only If only Initial Ω Final	For colors other f-extinguishal fault, carbon is r trobn: self-exting tor are V0. If on rotor: RT-V0 Wiper r position (Sta	ble property non self-exting juishable prop ly the housing	y, V0, for ho uishable, cern erty can be ac needs to be \	using and net is Self-ex dded. V0 me	rotor: tinguishal	ole: ing C	(blank) V0 :J-V0, RT
2,5 HSMD Packaging Jlk R (Tape and 13 R (Tape and 15 H blank, bulk packaging Resistance va 0Ω 200Ω 220Ω 2	'2,5 V ' reel) ' reel) is implied. (2) blue 50Ω 470Ω	Τrr ((Ν.Α., Not A 500Ω 1	Dugh-hol blank) ⁽¹⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾	(Under # e e and Reel p 500ΚΩ	packaging is	SMD n (blan) T& T&F s only availa 2MΩ 2N	holes holes k) ⁽¹⁾ R 15 ble for SMD termina		For colors other f-extinguishal fault, carbon is r troon: self-exting tor are V0. If on rotor: RT-V0 Wiper r position (Sta or CCW	ble property non self-exting juishable prop ly the housing andard: 509	y, V0, for ho uishable, cern erty can be at needs to be v 6 ± 15°)	using and net is Self-ex dded. V0 me /0, then CJ-	rotor: tinguishal	ole: ing C (leave	(blank) V0 J-V0, RT
2,5 HSMD - Packaging ulk &R (Tape and 13 &R (Tape and 15' If blank, bulk packaging	'2,5 V ' reel) ' reel) is implied. (2) blue 50Ω 470Ω	Τrr ((Ν.Α., Not A 500Ω 1	Dugh-hol blank) ⁽¹⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾	(Under # e e and Reel p 500ΚΩ	packaging is	SMD n (blan) T& T&F s only availa 2MΩ 2N	bleb nodels k)(1)		For colors othe f-extinguishal fault, carbon is r irbon: self-exting tor are V0. If on rotor: RT-V0 Wiper r position (Sta or CCW or CW	ble property non self-exting guishable prop ly the housing andard: 50%	y, V0, for ho uishable, cern erty can be at needs to be \ 6 ± 15°) (at 3 hours:	using and net is Self-ex dded. V0 me /0, then CJ-	rotor: tinguishal	ole: ing C (leave PXH,	(blank) V0 J-V0, RT: blank) PI PF
 - Packaging - Packaging ulk 3.R (Tape and 13' 3.R (Tape and 15' if blank, bulk packaging - Resistance value 0.0 2000 2200 2 2.00 200 220 2 - Resistance lation 	 '2,5 V 'reel) 'reel) is implied. (2) blue 500 4700 250 470 	Τr α ((Ν.Α., Not A 500Ω 1 500 ⁻	Dugh-hol blank) ⁽¹⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾	(Under # e e and Reel p 500ΚΩ	packaging is 2 1MΩ 1 1M	SMD n (blan) T8 T&F s only availa 2MΩ 2N 2M 2N	bleb nodels k)(1)		For colors othe f-extinguishal fault, carbon is r rrbon: self-exting tor are V0. If on rotor: RT-V0 Wiper r position (Sta or CCW or CW or CW s: following clc	ble property on self-exting juishable prop ly the housing andard: 509 ock positions idard: <2Ncr	y, V0, for ho uishable, cern erty can be at needs to be \ 6 ± 15°) (at 3 hours:	using and net is Self-ex dded. V0 me /0, then CJ-	rotor: tinguishal	(leave PXH, (leave	(blank) V0 J-V0, RT e blank) PI PF ex: P3H
2,5 HSMD	 '2,5 V 'reel) 'reel) is implied. (2) blue 500 4700 250 470 	Τr α ((Ν.Α., Not A 500Ω 1 500 ⁻	Dugh-hol blank) ⁽¹⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾	(Under # e e and Reel p 500ΚΩ	equest, not	SMD n (blan) T8 T8F s only availa 2MΩ 2M 2M 2N 2M 2N	bleb nodels k)(1)		For colors othe f-extinguishal fault, carbon is r irbon: self-exting tor are V0. If on rotor: RT-V0 Wiper r position (Sta or CCW or CCW s: following clc r torque (Star	ble property on self-exting juishable prop ly the housing andard: 509 ock positions idard: <2Ncr	y, V0, for ho uishable, cern erty can be at needs to be \ 6 ± 15°) (at 3 hours:	using and net is Self-ex dded. V0 me /0, then CJ-	rotor: tinguishal	(leave PXH, (leave	(blank) V0 J-V0, RT blank) Pl PF ex: P3H blank)
2,5 HSMD	² ? reel) ² reel) ¹ reel) is implied. (2) slue 250 470Ω w / taper	Τr α ((Ν.Α., Not A 500Ω 1 500 ⁻	Dugh-hol blank) ⁽¹⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾	(Under # e e and Reel p 500ΚΩ	packaging is 1 MΩ 1 MΩ 1 M	SMD n (blan) T8 T&F s only availa 2MΩ 2N 2MΩ 2N 2M 2N 2A 8	bleb nodels k)(1)		For colors othe f-extinguishal fault, carbon is r irbon: self-exting tor are V0. If on rotor: RT-V0 Wiper r position (Sta or CCW or CCW s: following clc r torque (Star	ble property non self-exting guishable prop ly the housing andard: 509 ck positions ndard: <2Ncr cm	y, V0, for ho uishable, cern earty can be ad needs to be V 6 ± 15°) ; at 3 hours: n)	using and net is Self-ex- ided. V0 me /0, then CJ ⁻¹ P3H	rotor: tinguishal	(leave PXH, (leave	(blank) V0 J-V0, RT blank) Pl PF ex: P3H blank)
 - Packaging - Packaging ulk 3R (Tape and 13' 3R (Tape and 15' 1f blank, bulk packaging - Resistance va 0Ω 200Ω 220Ω 2 200 200 220Ω 2 - Resistance la n - Linear bg - Logarithmic ntilog - Antilogari 	 '2,5 V ' reel) ' reel) is implied. (2) slue 50Ω 470Ω 250 470 w / taper thmic 	Trα (1 Ν.Α., Νοτ Α 500Ω 1 500Ω 1	Dugh-holi blank) ⁽¹⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ φρίιcable: Тар KΩ 2KΩ 1K 2K	(Under # e e and Reel p 500ΚΩ	2 1MQ 2 1MQ 2 1MQ 4 (SMD n (blan) T& T&F s only availa 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M	ble) nodels k) ⁽¹⁾ R R R R R R R R R R R R R		For colors othe f-extinguishal fault, carbon is r arbon: self-exting tor are V0. If on rotor: RT-V0 Wiper r position (Sta or CCW or CW s: following clc r torque (Star torque, < 1.5N	ble property non self-exting guishable prop ly the housing andard: 509 ck positions ndard: <2Nor cm rs with ass	y, V0, for ho uishable, cern earty can be ad needs to be V 6 ± 15°) ; at 3 hours: n)	using and net is Self-ex- ided. V0 me /0, then CJ ⁻¹ P3H	rotor: tinguishal	ole: ing C (leave PXH, (leave P	(blank) V0 J-V0, RT blank) Pl PF ex: P3H blank)
2,5 HSMD	 '2,5 V ' reel) ' reel) is implied. (2) slue 50Ω 470Ω 250 470 w / taper thmic 	Trα (1 Ν.Α., Νοτ Α 500Ω 1 500Ω 1	Dugh-holi blank) ⁽¹⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ φρίιcable: Тар KΩ 2KΩ 1K 2K	(Under # e e and Reel p 500ΚΩ	2 1MQ 2 1MQ 2 1MQ 4 (SMD n (blan) T8 T&F s only availa 2MΩ 2N 2MΩ 2N 2M 2N 2A 8	ble) nodels k) ⁽¹⁾ R R R R R R R R R R R R R		For colors othe f-extinguishal fault, carbon is r rrbon: self-exting tor are V0. If on rotor: RT-V0 // r position (Sta or CCW or CW or CW is: following clc r torque (Star corque, < 1.5N Potentiomete mbled from ter mbled from col	ble property non self-exting juishable prop ly the housing andard: 509 ck positions indard: <2Ncr cm rs with asse minal side lector side	y, V0, for ho uishable, cern earty can be ad needs to be V 6 ± 15°) ; at 3 hours: n)	using and net is Self-ex- ided. V0 me /0, then CJ ⁻¹ P3H	rotor: tinguishal	C C C C C C C C C C C C C C C C C C C	(blank) V0 J-V0, RT blank) Pl pF ex: P3H blank) GB
 Packaging Packaging IIk R (Tape and 13) R (Tape an	 '2,5 V ' reel) ' reel) is implied. (2) slue 50Ω 470Ω 250 470 w / taper thmic 	Trα (1 Ν.Α., Νοτ Α 500Ω 1 500Ω 1	Dugh-holi blank) ⁽¹⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ φρίιcable: Тар KΩ 2KΩ 1K 2K	(Under # e e and Reel p 500ΚΩ	2 1MQ 2 1MQ 2 1MQ 4 (SMD n (blan) T& T&F s only availa 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M	ble) nodels k) ⁽¹⁾ R R R R R R R R R R R R R		For colors othe f-extinguishal fault, carbon is r rrbon: self-exting tor are V0. If on rotor: RT-V0 Wiper r position (Sta or CCW or CW or CW is: following clc r torque (Star torque, < 1.5N Potentiomete mbled from ter	ble property non self-exting guishable prop ly the housing andard: 509 ack positions ndard: <2Nor cm rs with asse minal side lector side re	 y, V0, for ho uishable, cern erty can be ac needs to be V 6 ± 15°) ; at 3 hours: n) 	using and net is Self-ex- ided. V0 me /0, then CJ ⁻¹ P3H	rotor: tinguishal	C C (leave (leave PXH, r (leave P V V V V	(blank) V0 J-V0, RT blank) PI pF ex: P3H blank) GB
Packaging Packaging Interpretation Interpretation If blank, bulk packaging If blank, bulk packaging Resistance value Constraints Constra	(2,5 V ² reel) ¹ reel) ¹ reel) ² simplied. (2) ³ lue ⁵ 0Ω 470Ω ² 50Ω 470Ω ² 50 470 ⁴ taper thmic thmic two codes	Tra ((Ν.Α., Νοτ Α 500Ω 1 500 -	blank) ⁽¹⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ pplicable: Tap KΩ 2KΩ IK 2K d:	(Under r e e and Reel p 500KΩ 500K	equest. not i 1MΩ i 1MΩ i 1M i CODE	SMD n (blan) (blan) T&F s only availa 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M	ble) nodels k) ⁽¹⁾ R 115 ble for SMD termina 120 4M70 5M M2 4M7 5M	Iz Iz <thiz< th=""> Iz Iz Iz<</thiz<>	For colors othe Fextinguishal fault, carbon is r irbon: self-exting tor are V0. If on rotor: RT-V0 Wiper r position (Str or CCW or CCW or CCW s: following clc r torque (Star rotorque, < 1.5N Potentiomete mbled from ter mbled from col ssory Reference	ble property on self-exting juishable prop y the housing andard: 509 ack positions indard: <2Ncr cm rs with asse minal side llector side re d thumbwhe	 y, V0, for ho uishable, cern erty can be ac needs to be V 6 ± 15°) ; at 3 hours: n) 	using and net is Self-ex- ided. V0 me /0, then CJ ⁻¹ P3H	rotor: ttinguishal ans hous V0.	(leave (leave PXH, (leave V V V Examp	(blank) V0 J-V0, RT e blank) Pl ex: P3H e blank) GB VT VT VTI XXX vec 6030
Packaging Packaging Interface Action Packaging Interface Action Packaging Interface Action Packaging If blank, bulk packaging Presistance Value Color 200 220 2 Packaging Pa	(2,5 V 2 reel) 1 reel) 1 reel) 1 reel) 1 reel) 2 50Ω 470Ω 2 50 470 w / taper thmic thmic we codes %	Tra ((Ν.Α., Not A 500Ω 1 500 -	blank) ⁽¹⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ pplicable: Tap KΩ 2KΩ IK 2K d:	(Under r e and Reel p 500KΩ 500K	equest. not i 1MΩ i 1MΩ i 1M i CODE	SMD n (blan) (blan) T&F s only availa 2MΩ 2M 2MΩ 2M 2M 2M A B C YXXXXXX ±10% ±10%	ble) nodels k) ⁽¹⁾ R 15 120 4M70 5M 120 4M7 5M 12 4M7 5M 13 5M 14	Image: 12 - 1 Color -	For colors othe f-extinguishal fault, carbon is r irbon: self-exting tor are V0. If on rotor: RT-V0 Wiper r position (Sta or CCW or CCW or CCW s: following clc r torque (Star torque, < 1.5N Potentiomete mbled from ter mbled from ter mbled from col ssory Reference st of shaft or thu elf-extinguishable	ble property on self-exting juishable prop ly the housing andard: 509 ock positions indard: <2Nor cm rs with asse minal side lector side re d thumbwheel e.	 y, V0, for ho uishable, cern eerty can be ac needs to be \ 6 ± 15°) ; at 3 hours: m) embled acc els available 	using and net is Self-ex- ided. V0 me /0, then CJ ⁻¹ P3H	rotor: ttinguishal ans hous V0.	(leave PXH, (leave PXH, (leave V V V V Examp (leave	(blank) V0 J-V0, RT blank) Pl blank) Pl blank) GB VT VTI VTI VTI e: 6030 le, white: blank)
Packaging Packaging Interpretation Interpretation If blank, bulk packaging If blank, bulk packaging Resistance value Constraints Constra	(2,5 V 2 reel) 1 reel) 1 reel) 1 reel) 1 reel) 2 50Ω 470Ω 2 50 470 w / taper thmic thmic we codes %	Tra ((Ν.Α., Νοτ Α 500Ω 1 500 -	blank) ⁽¹⁾ (N.A.) ⁽²⁾ (N.A.) ⁽²⁾ pplicable: Tap KΩ 2KΩ IK 2K d:	(Under r e e and Reel p 500KΩ 500K	equest. not i 1MΩ i 1MΩ i 1M i CODE	SMD n (blan) (blan) T&F s only availa 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M 2MΩ 2M	ble) nodels k) ⁽¹⁾ R 15 120 4M70 5M 120 4M7 5M 12 4M7 5M 13 5M 14	 IZ - 1 Color * Sell By de For cz and rc If only Is. I3 - 1 Wipe Initial Other Wipe Iow 1 A Other Asser Asser Acce. Seel Ii Color s Self-s 	For colors othe F-extinguishal fault, carbon is r irbon: self-exting tor are V0. If on rotor: RT-V0 Wiper r position (Str or CCW or CCW or CCW s: following clc r torque (Star corque, < 1.5N Potentiomete mbled from ter mbled from col ssory Reference st of shafts and of shaft or thu	ble property on self-exting juishable prop ly the housing andard: 509 ck positions idard: <2Nor cm indard: <	 y, V0, for ho uishable, cern erty can be ac needs to be \ 6 ± 15°) at 3 hours: n) embled acc els available ndard UL 94 	using and net is Self-ex ided. V0 me /0, then CJ ⁻² P3H essories	rotor: ttinguishal ans hous V0.	(leave PXH, (leave PXH, (leave V V V V Examp (leave	(blank) V0 J-V0, RT e blank) Pl ex: P3H e blank) GB VT VTI VTI XXX vie: 6030 le, white:
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Color c	Color chart for rotor, housing and accessories								
Black ⁽¹⁾	White	Neutral	Transp.	Red	Green	Yellow	Blue	Grey	Brown
NE	BA	IN	TA	RO	VE	AM	AZ	GS	MR

(1) black is not an option for housings.

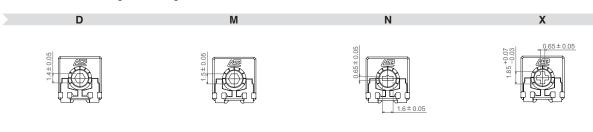
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9 - Cut Track – Open circuit.

Open circuit at beginning of track, fully CCW	PCI
Open circuit at end of track, fully CW	PCF

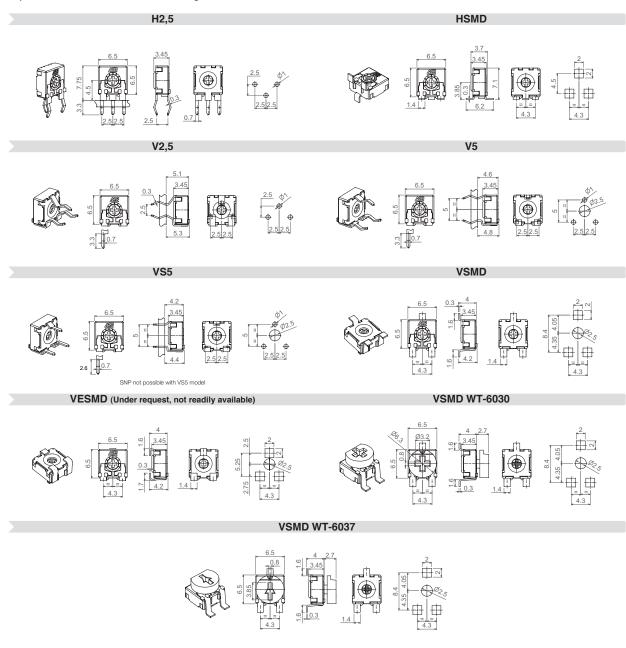
Rotors

Rotors are drawn in their standard positioning, 50% of rotation. Alternative delivery positioning can be requested. Accessories in this catalogue are designed for the X rotor, unless otherwise stated.



Models

All models shown here have the most common rotor for 6mm potentiometers: the X rotor, which can be paired with any shaft or thumbwheel from this catalogue. Different rotors are available from the menu above.



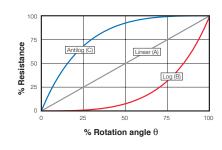
CA6

Tapers

The standard taper is linear (A). Log (B) and Antilog (C) tapers are also available, as well as special tapers according

to customer's specifications.

REGULAR TAPERS



Potentiometers with cut track

The cut track is an area with very high resistive value, resulting in an open circuit. It is widely used in lighting applications. PCI = Cut at initial position, when the potentiometer is turned fully counter clockwise.

PCF = Cut at final position, when the potentiometer is turned fully clockwise.

Other positions are available on request.



Terminals

By default, terminals are always crimped (with snap in, "SNP") to better hold the component to the PCB during the soldering operation, except for VS5, with short terminals that do not allow for SNP.

ACP can provide straight terminals if needed.



Also, there is an option of having shorter terminal tips.



Accessories can be mounted on potentiometers through either the front side (WT) or the collector side (WTI). For the specific angular position of shafts with planes, a drawing with the exact position is requested.

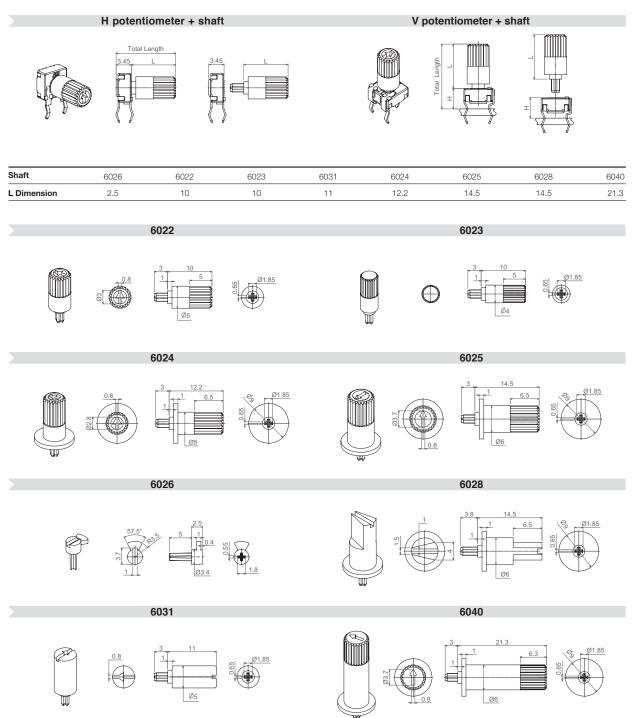
 WT Front side
 WTI Collector side
 WT Front side
 WTI Collector side

 Image: WTI Collector side
 Image: WTI Collector side
 Image: WTI Collector side
 Image: WTI Collector side

Shafts are available in different colors (color chart in "how to order" section) and with self-extinguishable property, according to UL 94 V-0, under request. ACP can study special shaft designs.

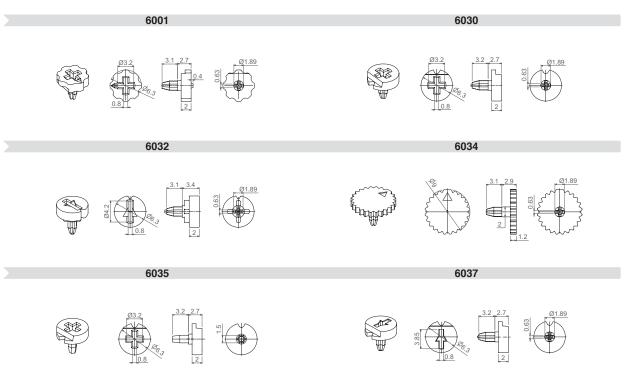
Shafts can be sold separately or delivered already mounted on the potentiometer at ACP.

When a shaft is mounted on a potentiometer, the distance from the top of the potentiometer to the top of the shaft is marked with "L" in the table below, as shown in the drawings:



Thumbwheels are available in different colors (color chart in "how to order" section) and with self-extinguishable property according to UL 94 V-0, under request.

Thumbwheels can be mounted on the potentiometers at ACP (see models with WT-6030 or WT-6037) or sold separately. ACP can study special thumbwheel designs.

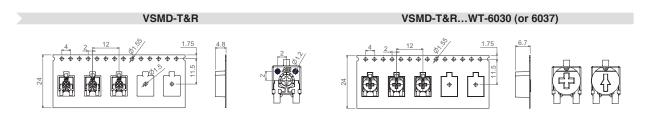


Bulk packaging:

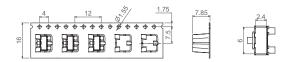
Potentiometer model	With shaft or thumbwheel inserted?	Pieces per small box (150 x 100 x 70)	Pieces per bigger box (250 x 150 x 70, CG on description)
	None, only potentiometers.	1.000	4.000
H2,5 - V2,5 - V5	6001, 6030, 6032, 6037	1.000	3.000
VS5 - HSMD - VSMD	6024, 6025, 6028	300	To be determined.
	6022, 6023, 6031	500	To be determined.

Tape & Reel packaging:	With thumbwheel inserted?	13" Reel (Standard), with 24mm width tape	15" Reel, with 24mm width tape
VSMD	None, only potentiometers.	1.200 pcs per reel, 12mm step between cavities.	1.700 pcs per reel, 12mm step between cavities.
VOIVID	6030 or 6037	750 pcs per reel, 12mm step between cavities.	1.100 pcs per reel, 12mm step between cavities.
HSMD	None, only potentiometers.	750 pcs per reel, 12mm step between cavities.	1.000 pcs per reel, 12mm step between cavities.
	With specific thumbwheel.	Under request.	Under request.

The 13" reel is the standard. For the 15" reel, T&R15 is added to the description.



HSMD-T&R





These are standard features; other specifications and out of range values can be studied on request.

	CA6 Through-hole	CA6 SMD
Range of resistance values* Lin (A) Log (B) Antilog (C)	$100\Omega \le Rn \le 5M\Omega$ 1 K\Omega \le Rn \le 2M2\Omega	$\begin{array}{l} 100\Omega \leq Rn \leq 1M\Omega \\ 1 \ K\Omega \leq Rn \leq 1 \ M\Omega \end{array}$
$\label{eq:constraint} \begin{array}{c} \text{Tolerance}^* \\ & \text{Rn} < 100\Omega; \\ & 100\Omega \leq \text{Rn} \leq 100 \text{K}\Omega \\ & 100 \text{K} < \text{Rn} \leq 1 \text{M}\Omega; \\ & 1 \text{M}\Omega < \text{Rn} \leq 5 \text{M}\Omega; \\ & \text{Rn} > 5 \text{M}\Omega; \end{array}$	+50%, -30% (out of range)	
Variation laws	Lin (A), Log (B), Antilog (C). Oth	her tapers available on request
Residual resistance	Lin (A), Log (B), Antilog (C) \leq 5	5*10-3*Rn. Minimum value 2 Ω
CRV - Contact Resistance Variation (dynamic)	≤3%Rn	
CRV - Contact Resistance Variation (static)	Contact Resistance Variation (static) ≤5%Rn	
Maximum power dissipation** Lin (A) Log (B), Antilog (C)	0.10W	
Maximum voltage Lin (A) Log (B), Antilog (C)	100VDC 60VDC	
Operating temperature	-25°C +70°C (+85°C on request)	
$\begin{array}{c} \text{Temperature coefficient} \\ 100\Omega \leq \text{Rn} \leq 10 \text{K}\Omega \\ 10 \text{K}\Omega < \text{Rn} \leq 5 M\Omega \end{array}$	+200/ -300 ppm +200/ -500 ppm	+200/ -500 ppm +200/ -1000 ppm

* Out of range ohm values and tolerances are available on request, please, inquire.

** Dissipation of special tapers will vary, please, inquire.

	CA6 Through-hole	CA6 SMD
Resistive element	Carbon technology	Carbon technology
Angle of rotation (mechanical)	235° -	± 10°
Angle of rotation (electrical)	215° :	± 20°
Wiper standard delivery position	50% :	± 15°
Max. stop torque	4 N	cm
Max. push/pull on rotor	9.8	3 N
Wiper torque*	<2 N	lcm
Mechanical life	1.000 cycles (others	available on request)

* Stronger or softer torque feeling is available on request.

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resu	lts

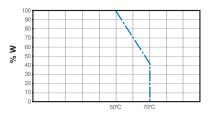
The following typical test results are given at 23°C \pm 2°C and 50% \pm 25% RH.

CA6 Through-hole and SMD

	Test conditions	Typical variation of nominal resistance
Damp heat	500 h. at 40°C and 95% RH	+5%, -2%
Thermal cycles	16 h at 85°C, plus 2 h at –25°C	±2.5%
Load life	1.000 h. at 50°C	+0%; -6%
Mechanical life	1.000 cycles at 10 c.p.m. and at 23°C ± 2°C	±4%
Soldering effect	2 seconds at 350°C	±1%
Storage (3 years)	3 years at 23°C ± 2°C	±3%

CA6 Through-hole and SMD

Power derating curve:



Representation of the typical variation of nominal resistance (with 95% confidence) throughout the ohm value range:

CA6 Through-hole and SMD

