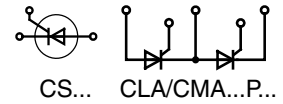


Phase Control Thyristors

Thyristors are very rugged devices. Compared to all other controlled semiconductor components, they feature the highest current capacity per chip area especially at high voltage. They are mainly used as control devices in 50 and 60 Hz AC mains equipment. Principal applications are static converter circuits for speed control of DC-drives, or switching and control functions for temperature, lighting, soft-start, etc. in single-phase and three-phase AC switch configurations. Phase control thyristors are designed for optimal forward conduction and reverse blocking characteristics, due to only moderate requirements for turn-on and turn-off parameters.

Phase Control Thyristors

$$I_{TAV} = 5 - 100 \text{ A}$$



Type	V_{RRM} V_{DRM}	I_{TAV}	@ T_C	$I_{T(RMS)}$	I_{TSM} 45°C 10 ms	$(dv/dt)_{cr}$	V_{TO}	r_T	T_{VJM}	R_{thJC}	R_{thCH}	Fig. No.	Package style
➤ New	V	A	°C	A	A	V/μs	V	mΩ	°C	K/W	K/W		Outline drawings on pages O-29...O-51
➤ CLA 5E1200UC	1200	5	125	8	50	500	0.90	85.0	150	2.50	0.50	X004	X005a TO-220AB
➤ CNA 10E2500FB	2500	10	100	16	120	2500	0.97	30.0	125	1.50	0.15	X024c	
CS 19-08ho1	800	19	85	29	160	500	0.85	27.0	125	1.00	0.25	X005a	
CS 19-12ho1	1200												
CS 19-08ho1S	800											X011b	
CS 19-12ho1S	1200												
CS 20-12io1	1200	19	85	30	200	1000	1.10	40.0	125	0.62	0.20	X014a	
CS 20-14io1	1400												
CS 20-16io1	1600												
CS 20-22moF1	2200	18	85	28	200	2500	0.97	17.0	125	0.92	0.15	X024c	
CS 20-25mo1F	2500												
➤ CS 20-25moT1	2500	18	85	28	200	2500	0.97	17.0	125	0.80	0.15	X019	
CS 22-08io1M	800	22	85	35	300	500	0.90	18.0	150	2.50	0.50	X007a	
CS 22-12io1M	1200												
➤ CLA 30E1200PB	1200	30	115	35	300	500	0.86	13.2	150	0.65	0.50	X005a	
➤ CLA 30E1200PC	1200	30	115	35	300	500	0.86	13.2	150	0.65	0.25	X011b	
➤ CLA 30E1200HB	1200	30	120	70	300	500	0.86	12.5	150	0.55	0.25	X014a	
CMA 30E1600PB	1600	30	115	50	260	500	0.92	18.0	150	0.75	0.50	X005a	
CMA 30E1600PN	1600	30	40							2.50		X007a	
CMA 30P1600FC	2x 1600	30	90	47	300	1000	0.90	13.8	150	1.05	0.25	X024a	
CS 30-12io1	1200	31	85	49	300	1000	0.90	15.0	125	0.62	0.20	X014a	
CS 30-14io1	1400												
CS 30-16io1	1600												
➤ CLA 40P1200FC	1200	40	95	63	550	1000	0.86	7.9	150	0.80	0.20	X024a	
CS 45-08io1	800	45	105	70	520	1000	0.90	10.7	140	0.30	0.25	X014a	
CS 45-12io1	1200												
CS 45-16io1	1600												
CS 45-16io1R	1600	48	75	75	520	1000	0.85	11.0	140	0.62	0.20	X016a	
CLA 50E1200HB	1200	50	125	70	550	1000	0.88	7.7	150	0.25	0.25	X014a	
CLA 50E1200TC	1200	50	125	70	550	1000	0.88	7.7	150	0.25	0.15	X019	
CMA 50P1600FC	2x 1600	50	90	79	800	1000	0.92	6.3	150	0.65	0.25	X024a	
CS 60-12io1	1200	48	105	75	1500	1000	0.85	3.7	140	0.32	0.15	X015a	
CS 60-14io1	1400												
CS 60-16io1	1600												
➤ CLA 80E1200HF	1200	80	115	70	900	1000	0.88	6.3	150	0.20	0.25	X015a	
													X024c ISOPLUS i4-PAC™