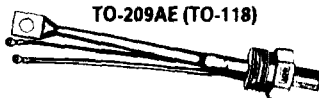


# Phase Control SCR

Part Number	VRRM	I <sub>T(RMS)</sub> (A)	I <sub>T(AV)</sub> (A)	T <sub>C</sub> (°C)	I <sub>TSM</sub> (2)		(3)	(3)	(4)	(7)	R <sub>thJC</sub>	Notes	Fax-on-Demand Number	Case Style, (Case Outline) (1)	
	VDRM (V)				50 Hz (A)	60 Hz (A)	V <sub>GT</sub> (V)	I <sub>GT</sub> (mA)	V <sub>TM</sub> (V)	I <sub>TM</sub> (A)	dv/dt (V/μs)				DC (°C/W)
<b>Thyristors</b>															
50RIA10	100	80	50	94	1200	1255	2.5	100	1.60	500	0.35	(6)	30062	TO-208AC (TO-65)(T2)	
50RIA20	200	80	50	94	1200	1255	2.5	100	1.60	500	0.35	(6)	30062		
50RIA40	400	80	50	94	1200	1255	2.5	100	1.60	500	0.35	(6)	30062		
50RIA60	600	80	50	94	1200	1255	2.5	100	1.60	500	0.35	(6)	30062		
50RIA80	800	80	50	94	1200	1255	2.5	100	1.60	500	0.35	(6)	30062		
50RIA100	1000	80	50	94	1200	1255	2.5	100	1.60	500	0.35	(6)	30062		
50RIA120	1200	80	50	94	1200	1255	2.5	100	1.60	500	0.35	(6)	30062		
50RIA140	1400	80	50	94	900	942	2.5	100	1.60	500	0.35	(6)	30062		
50RIA160	1600	80	50	94	900	942	2.5	100	1.60	500	0.35	(6)	30062		
2N1800	600	110	70	65	955	1000	2.5	70	1.85	220	0.4	(8)(9)	30082		TO-208AD (TO-83)(T3)
2N1801	700	110	70	65	955	1000	2.5	70	1.85	220	0.4	(8)(9)	30082		
2N1802	800	110	70	65	955	1000	2.5	70	1.85	220	0.4	(8)(9)	30082		
2N1803	900	110	70	65	955	1000	2.5	110	2.00	220	0.4	(8)(9)	30082		
2N1804	1000	110	70	65	955	1000	2.5	110	2.00	220	0.4	(8)(9)	30082		
80RIA40	400	125	80	91	1600	1700	2.5	120	1.40	250	0.35	(5)(9)(12)(13)	30085		TO-209AC (TO-94)(T4)
80RIA80	800	125	80	91	1600	1700	2.5	120	1.40	250	0.35	(5)(9)(12)(13)	30085		
80RIA120	1200	125	80	91	1600	1700	2.5	120	1.40	250	0.35	(5)(9)(12)(13)	30085		
110RKI40	400	172	110	90	1750	1830	2.0	100	1.50	350	0.27	(6)(9)(12)(13)	25152	(T6)	
110RKI80	800	172	110	90	1750	1830	2.0	100	1.50	350	0.27	(6)(9)(12)(13)	25152		
110RKI120	1200	172	110	90	1750	1830	2.0	100	1.50	350	0.27	(6)(9)(12)(13)	25152		
ST110S04POV	400	175	110	90	2270	2380	3.0	150	1.52	350	0.195	(6)(9)(11)	25167	(T5)	
ST110S08POV	800	175	110	90	2270	2380	3.0	150	1.52	350	0.195	(6)(9)(11)	25167		
ST110S12POV	1200	175	110	90	2270	2380	3.0	150	1.52	350	0.195	(6)(9)(11)	25167		
ST110S14P0	1400	175	110	90	2270	2380	3.0	150	1.52	350	0.195	(6)(9)(11)	25167	(T7)	
ST110S16P0	1600	175	110	90	2270	2380	3.0	150	1.52	350	0.195	(6)(9)(11)	25167		
180RKI40	400	285	180	80	3500	3660	2.5	150	1.35	570	0.15	(9)(10)(13)	25153	TO-209AB (TO-93)(T9)	
180RKI80	800	285	180	80	3500	3660	2.5	150	1.35	570	0.15	(9)(10)(13)	25153		
180RKI100	1000	285	180	80	3500	3660	2.5	150	1.35	570	0.15	(9)(10)(13)	25153		
ST180S04POV	400	314	200	85	4200	4400	3.0	150	1.75	570	0.105	(6)(9)(11)	25165	(T8)	
ST180S08POV	800	314	200	85	4200	4400	3.0	150	1.75	570	0.105	(6)(9)(11)	25165		
ST180S12POV	1200	314	200	85	4200	4400	3.0	150	1.75	570	0.105	(6)(9)(11)	25165		
ST180S16P0	1600	314	200	85	4200	4400	3.0	150	1.75	570	0.105	(6)(9)(11)	25165	(T10)	
ST180S18P0	1800	314	200	85	4200	4400	3.0	150	1.75	570	0.105	(6)(9)(11)	25165		
ST180S20P0	2000	314	200	85	4200	4400	3.0	150	1.75	570	0.105	(6)(9)(11)	25165		
ST230S04POV	400	361	230	85	4800	5000	3.0	150	1.55	720	0.1	(6)(9)(11)	25163	(T8)	
ST230S08POV	800	361	230	85	4800	5000	3.0	150	1.55	720	0.1	(6)(9)(11)	25163		
ST230S12POV	1200	361	230	85	4800	5000	3.0	150	1.55	720	0.1	(6)(9)(11)	25163		
ST230S14P0	1400	361	230	85	4800	5000	3.0	150	1.55	720	0.1	(6)(9)(11)	25163	(T10)	
ST230S16P0	1600	361	230	85	4800	5000	3.0	150	1.55	720	0.1	(6)(9)(11)	25163		
ST280S04POV	400	440	280	85	6600	6900	3.0	150	1.28	880	0.105	(6)(9)(11)	25161	(T8)	
ST280S06POV	600	440	280	85	6600	6900	3.0	150	1.28	880	0.105	(6)(9)(11)	25161		
ST300S04P0	400	470	300	75	6730	7040	3.0	200	1.66	940	0.1	(6)(9)(11)	25158	TO-209AE (TO-118)(T11)	
ST300S08P0	800	470	300	75	6730	7040	3.0	200	1.66	940	0.1	(6)(9)(11)	25158		
ST300S12P0	1200	470	300	75	6730	7040	3.0	200	1.66	940	0.1	(6)(9)(11)	25158		
ST300S16P0	1600	470	300	75	6730	7040	3.0	200	1.66	940	0.1	(6)(9)(11)	25158		
ST300S18P0	1800	470	300	75	6730	7040	3.0	200	1.66	940	0.1	(6)(9)(11)	25158		
ST300S20P0	2000	470	300	75	6730	7040	3.0	200	1.66	940	0.1	(6)(9)(11)	25158		
ST330S04P0	400	520	330	75	7570	7920	3.0	200	1.51	1040	0.1	(6)(9)(11)	25156		
ST330S08P0	800	520	330	75	7570	7920	3.0	200	1.51	1040	0.1	(6)(9)(11)	25156		
ST330S12P0	1200	520	330	75	7570	7920	3.0	200	1.51	1040	0.1	(6)(9)(11)	25156		
ST330S14P0	1400	520	330	75	7570	7920	3.0	200	1.51	1040	0.1	(6)(9)(11)	25156		
ST330S16P0	1600	520	330	75	7570	7920	3.0	200	1.51	1040	0.1	(6)(9)(11)	25156		



TO-209AC (TO-94)



TO-209AE (TO-118)



TO-200AA (A-Puk)



TO-209AB (TO-93)



TO-200AB (E-Puk)



TO-200AC (B-Puk)



## Phase Control SCR

Part Number (1)(14)	VRRM VDRM (V)	IT(RMS) (A)	IT(AV)@TC (A)	TC (°C)	ITSM(2)		(3) VGT (V)	(3) IGT (mA)	(9) VTM (V)	(9) θITM (A)	(7) dv/dt (V/μs)	RthJ-HS DC (°C/W)	Notes	Fast-on-Demand Number	Case Style, (Case Outline) (1)
					50 Hz (A)	60 Hz (A)									
ST180C04C0	400	660	350	55	4200	4400	3.0	150	1.96	750	500	0.08		25164	TO-200AB (A-Puk)(T12)
ST180C08C0	800	660	350	55	4200	4400	3.0	150	1.96	750	500	0.08		25164	
ST180C12C0	1200	660	350	55	4200	4400	3.0	150	1.96	750	500	0.08		25164	
ST180C16C0	1600	660	350	55	4200	4400	3.0	150	1.96	750	500	0.08		25164	
ST180C18C0	1800	660	350	55	4200	4400	3.0	150	1.96	750	500	0.08		25164	
ST180C20C0	2000	660	350	55	4200	4400	3.0	150	1.96	750	500	0.08		25164	
ST230C04C0	400	780	410	55	4800	5000	3.0	150	1.69	880	500	0.08		25162	
ST230C08C0	800	780	410	55	4800	5000	3.0	150	1.69	880	500	0.08		25162	
ST230C12C0	1200	780	410	55	4800	5000	3.0	150	1.69	880	500	0.08		25162	
ST230C14C0	1400	780	410	55	4800	5000	3.0	150	1.69	880	500	0.08		25162	
ST230C16C0	1600	780	410	55	4800	5000	3.0	150	1.69	880	500	0.08		25162	
ST280C04C0	400	960	500	55	6600	6900	3.0	150	1.36	1050	500	0.08		25159	
ST280C06C0	600	960	500	55	6600	6900	3.0	150	1.36	1050	500	0.08		25159	
ST280CH04C0	400	1130	500	80	6000	6300	3.0	150	1.35	1000	500	0.08	(10)	25160	
ST280CH06C0	600	1130	500	80	6000	6300	3.0	150	1.35	1000	500	0.08	(10)	25160	
ST300C04C0	400	1290	650	55	6730	7040	3.0	200	2.18	1630	500	0.04		25157	TO-200AB (E-Puk)(T13)
ST300C08C0	800	1290	650	55	6730	7040	3.0	200	2.18	1630	500	0.04		25157	
ST300C12C0	1200	1290	650	55	6730	7040	3.0	200	2.18	1630	500	0.04		25157	
ST300C16C0	1600	1290	650	55	6730	7040	3.0	200	2.18	1630	500	0.04		25157	
ST300C18C0	1800	1290	650	55	6730	7040	3.0	200	2.18	1630	500	0.04		25157	
ST300C20C0	2000	1290	650	55	6730	7040	3.0	200	2.18	1630	500	0.04		25157	
ST330C04C0	400	1420	720	55	7570	7920	3.0	200	1.96	1800	500	0.04		25155	
ST330C08C0	800	1420	720	55	7570	7920	3.0	200	1.96	1800	500	0.04		25155	
ST330C12C0	1200	1420	720	55	7570	7920	3.0	200	1.96	1800	500	0.04		25155	
ST330C14C0	1400	1420	720	55	7570	7920	3.0	200	1.96	1800	500	0.04		25155	
ST330C16C0	1600	1420	720	55	7570	7920	3.0	200	1.96	1800	500	0.04		25155	
ST380C04C0	400	1900	960	55	12600	13200	3.0	200	1.60	3000	500	0.04		25168	
ST380C06C0	600	1900	960	55	12600	13200	3.0	200	1.60	3000	500	0.04		25168	
ST380CH04C0	400	2220	960	80	10500	11000	3.0	200	1.58	2900	500	0.04	(10)	25169	
ST380CH06C0	600	2220	960	80	10500	11000	3.0	200	1.58	2900	500	0.04	(10)	25169	
ST300C04L0	400	1115	560	55	6730	7040	3.0	200	2.18	1635	500	0.05		25157	TO-200AC (B-Puk)(T14)
ST300C08L0	800	1115	560	55	6730	7040	3.0	200	2.18	1635	500	0.05		25157	
ST300C12L0	1200	1115	560	55	6730	7040	3.0	200	2.18	1635	500	0.05		25157	
ST300C16L0	1600	1115	560	55	6730	7040	3.0	200	2.18	1635	500	0.05		25157	
ST300C18L0	1800	1115	560	55	6730	7040	3.0	200	2.18	1635	500	0.05		25157	
ST300C20L0	2000	1115	560	55	6730	7040	3.0	200	2.18	1635	500	0.05		25157	
ST330C04L0	400	1230	650	55	7570	7925	3.0	200	1.9	1730	500	0.05		25154	
ST330C08L0	800	1230	650	55	7570	7925	3.0	200	1.9	1730	500	0.05		25154	
ST330C12L0	1200	1230	650	55	7570	7925	3.0	200	1.9	1730	500	0.05		25154	
ST330C14L0	1400	1230	650	55	7570	7925	3.0	200	1.9	1730	500	0.05		25154	
ST330C16L0	1600	1230	650	55	7570	7925	3.0	200	1.9	1730	500	0.05		25154	
ST700C12L0	1200	1857	910	55	13200	13800	3.0	200	1.8	2000	500	0.031		25190	
ST700C16L0	1600	1857	910	55	13200	13800	3.0	200	1.8	2000	500	0.031		25190	
ST700C18L0	1800	1857	910	55	13200	13800	3.0	200	1.8	2000	500	0.031		25190	
ST700C20L0	2000	1857	910	55	13200	13800	3.0	200	1.8	2000	500	0.031		25190	
ST700C22L0	2200	1857	910	55	13200	13800	3.0	200	1.8	2000	500	0.031		25190	
ST730C08L0	800	2000	990	55	15000	15700	3.0	200	1.62	2000	500	0.031		25191	

(1) See page 105 for Case Outline information

(2) 100% VRRM re-applied @ Tj = Tj max 125°C

(3) Tj = 25°C

(5) dv/dt exponential to 0.67 VDRM; Tj = 125°C

(6) Available with metric stud. To order, change 'P' to 'M' in part number, e.g. ST180S04M0V.

(7) Linear to 0.8 VDRM; Tj = 125°C

(8) dv/dt exponential to 100% VDRM; Tj = 125°C

(9) VTM measured at Tj = Tj max

(10) Max Tj = 150°C

(11) Available with fast-on terminals. To order, change last '0' to '1' in part number, e.g. ST180S04P1V.

(12) Available with fast-on terminals. To order, change first '0' to '1' in part number, e.g. 81RIA40.

(13) Available with flag terminals. To order, change first '0' to '2' in part number, e.g. 82RIA40.

(14) DC operation; double side cooled