



semitronics hot line

discrete devices

TOLL FREE NUMBER 800-777-3960

# thyristors and triggers

silicon controlled rectifiers

Type (*Note 1)	Forward Current I <sub>F</sub> (Amps)	Max. Forward Max. Reverse Voltage V <sub>FM</sub> /V <sub>RM</sub> (volts) (Note 2)	Maximum Junction Temperature T <sub>J</sub> (°C)	Max. DC Gate Trigger Current I <sub>GT</sub> (mA)	DC Gate Trigger Voltage V <sub>GT</sub> (volts)	Case Style
2N681	25	25	125	40	2.0	TO-48
2N682	25	50	125	40	2.0	TO-48
2N683	25	100	125	40	2.0	TO-48
2N684	25	150	125	40	2.0	TO-48
2N685	25	200	125	40	2.0	TO-48
2N686	25	250	125	40	2.0	TO-48
2N687	25	300	125	40	2.0	TO-48
2N688	25	400	125	40	2.0	TO-48
2N689	25	500	125	40	2.0	TO-48
2N690	25	600	125	40	2.0	TO-48
2N764*	0.20	30	125	1.0	1.0	TO-18
2N765*	0.20	60	125	1.0	1.0	TO-18
2N766*	0.20	100	125	1.0	1.0	TO-18
2N767*	0.20	200	125	1.0	1.0	TO-18
2N876	0.35	15	150	0.2	0.8	TO-18
2N877	0.35	30	150	0.2	0.8	TO-18
2N878	0.35	60	150	0.2	0.8	TO-18
2N879	0.35	100	150	0.2	0.8	TO-18
2N880	0.35	150	150	0.2	0.8	TO-18
2N881	0.35	200	150	0.2	0.8	TO-18
2N882	0.35	300	150	0.2	0.8	TO-18
2N883	0.35	400	150	0.2	0.8	TO-18
2N884	0.35	15	150	0.02	0.6	TO-18
2N885	0.35	30	150	0.02	0.6	TO-18
2N886	0.35	60	150	0.02	0.6	TO-18
2N887	0.35	100	150	0.02	0.6	TO-18
2N888	0.35	150	150	0.02	0.6	TO-18
2N889	0.35	200	150	0.02	0.6	TO-18
2N892*	0.250	15	125	0.05	0.70	TO-18
2N893*	0.250	15	125	0.05	0.70	TO-18
2N899*	0.250	100/15	125	0.05	0.70	TO-18
2N900	0.250	200/15	125	0.05	0.70	TO-18
2N948	0.26	30	150	0.02	1.0	TO-18
2N949	0.26	60	150	0.02	1.0	TO-18
2N950	0.26	100	150	0.02	1.0	TO-18
2N951	0.26	200	150	0.02	1.0	TO-18
2N1595	1.6	50	125	10	3.0	TO-5
2N1596	1.6	100	125	10	3.0	TO-5
2N1597	1.6	200	125	10	3.0	TO-5
2N1598	1.6	300	125	10	3.0	TO-5
2N1599	1.6	400	125	10	3.0	TO-5
2N1600	4.0	50	125	10	3.0	TO-64
2N1601	4.0	100	125	10	3.0	TO-64
2N1602	4.0	200	125	10	3.0	TO-64
2N1603	4.0	300	125	10	3.0	TO-64
2N1604	4.0	400	125	10	3.0	TO-64
2N1686*	0.5	30	125	1.0	1.0	TO-5
2N1687*	0.5	60	125	1.0	1.0	TO-5
2N1688*	0.5	100	125	1.0	1.0	TO-5
2N1689*	0.5	200	125	1.0	1.0	TO-5
2N1770	4.7	25	125	15	2.0	TO-64
2N1770A	4.7	25	150	15	2.0	TO-64
2N1771	4.7	50	125	15	2.0	TO-64
2N1771A	4.7	50	150	15	2.0	TO-64
2N1772	4.7	100	125	15	2.0	TO-64
2N1772A	4.7	100	150	15	2.0	TO-64
2N1773	4.7	150	125	15	2.0	TO-64
2N1773A	4.7	150	150	15	2.0	TO-64
2N1774	4.7	200	125	15	2.0	TO-64
2N1774A	4.7	200	150	15	2.0	TO-64
2N1775	4.7	250	125	15	2.0	TO-64
2N1775A	4.7	250	150	15	2.0	TO-64
2N1776	4.7	300	125	15	2.0	TO-64
2N1776A	4.7	300	150	15	2.0	TO-64
2N1776B	4.7	300	150	15	2.0	TO-64
2N1777	4.7	400	125	15	2.0	TO-64
2N1777A	7.0	400	150	15	2.0	TO-64
2N1842	16	25	100	80	2.0	TO-48
2N1842A	16	25	125	80	2.0	TO-48
2N1843	16	50	100	80	2.0	TO-48
2N1844	16	100	100	80	2.0	TO-48
2N1845	16	150	100	80	2.0	TO-48
2N1846	16	200	100	80	2.0	TO-48
2N1847	16	250	100	80	2.0	TO-48
2N1848	16	300	100	80	2.0	TO-48

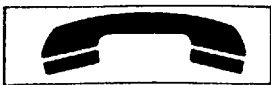
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Semitronics Corp.

## thyristors and triggers cont'd

### silicon controlled rectifiers — (cont'd)

Type (*Note 1)	Forward Current $I_F$ (Amps)	Max. Forward Max. Reverse Voltages $V_{FM}/V_{RPM}$ (volts) (Note 2)	Maximum Junction Temperature $T_J$ (°C)	Max. DC Gate Trigger Current $I_{GT}$ (mA)	DC Gate Trigger Voltage $V_{GT}$ (volts)	Case Style
2N1849	16	400	100	80	2.0	TO-48
2N1850	16	500	100	80	2.0	TO-48
2N1869	1.25	15	150	0.2	0.8	TO-5
2N1869A	1.25	15	150	0.2	0.8	TO-5
2N1870	1.25	30	150	0.2	0.8	TO-5
2N1870A	1.25	30	150	0.2	0.8	TO-5
2N1871	1.25	60	150	0.2	0.8	TO-5
2N1871A	1.25	60	150	0.2	0.8	TO-5
2N1872	1.25	100	150	0.2	0.8	TO-5
2N1872A	1.25	100	150	0.2	0.8	TO-5
2N1873	1.25	150	150	0.2	0.8	TO-5
2N1874	1.25	200	150	0.2	0.8	TO-5
2N1874A	1.25	200	150	0.2	0.8	TO-5
2N1875	1.25	15	150	0.020	0.6	TO-5
2N1875A	1.25	15	150	0.020	0.6	TO-5
2N1876	1.25	30	150	0.020	0.6	TO-5
2N1876A	1.25	30	150	0.020	0.6	TO-5
2N1877	1.25	60	150	0.020	0.6	TO-5
2N1877A	1.25	60	150	0.020	0.6	TO-5
2N1878	1.25	100	150	0.020	0.6	TO-5
2N1878A	1.25	100	150	0.020	0.6	TO-5
2N1879	1.25	150	150	0.020	0.6	TO-5
2N1878A	1.25	150	150	0.020	0.6	TO-5
2N1880	1.25	200	150	0.020	0.6	TO-5
2N1880A	1.25	200	150	0.020	0.6	TO-5
2N1881	1.0	30	150	2.0	2.0	TO-5
2N1882	1.0	60	150	2.0	2.0	TO-5
2N1883	1.0	100	150	2.0	2.0	TO-5
2N1884	1.0	150	150	2.0	2.0	TO-5
2N1885	1.0	200	150	2.0	2.0	TO-5
2N2009	1.3	25	150	0.2	1.0	TO-5
2N2010	1.3	50	150	0.2	1.0	TO-5
2N2011	1.3	100	150	0.2	1.0	TO-5
2N2012	1.3	200	150	0.2	1.0	TO-5
2N2013	1.3	300	150	0.2	1.0	TO-5
2N2014	1.3	400	150	0.2	1.0	TO-5
2N2322	1.6	25	125	0.2	0.8	TO-5
2N2322A	1.6	25	125	0.02	0.6	TO-5
2N2323	1.6	50	125	0.2	0.8	TO-5
2N2323A	1.6	50	125	0.02	0.6	TO-5
2N2324	1.6	100	125	0.2	0.8	TO-5
2N2324A	1.6	100	125	0.02	0.6	TO-5
2N2325	1.6	150	125	0.2	0.8	TO-5
2N2325A	1.6	150	125	0.02	0.6	TO-5
2N2326	1.6	200	125	0.2	0.8	TO-5
2N2326A	1.6	200	125	0.02	0.6	TO-5
2N2327	1.6	250	125	0.2	0.8	TO-5
2N2327A	1.6	250	125	0.02	0.6	TO-5
2N2328	1.6	300	125	0.2	0.8	TO-5
2N2328A	1.6	300	125	0.02	0.6	TO-5
2N2329	1.6	400	125	0.2	0.8	TO-5
2N2329A	1.6	400	125	0.02	0.6	TO-5
2N2679	0.35	30	150	0.02	0.7	TO-18
2N2679A	0.35	30	150	0.02	0.7	TO-18
2N2680	0.35	60	150	0.02	0.7	TO-18
2N2680A	0.35	60	150	0.02	0.7	TO-18
2N2681	0.35	100	150	0.02	0.7	TO-18
2N2681A	0.35	100	150	0.02	0.70	TO-18
2N2682	0.35	200	150	0.02	0.7	TO-18
2N2682A	0.35	200	150	0.02	0.70	TO-18
2N2683	0.28	30	125	0.02	0.8	TO-18
2N2683A	0.28	30	125	0.02	0.80	TO-18
2N2684	0.28	60	125	0.02	0.8	TO-18
2N2684A	0.28	60	125	0.02	0.80	TO-18
2N2685	0.28	100	125	0.02	0.8	TO-18
2N2685A	0.28	100	125	0.02	0.80	TO-18
2N2686	0.28	200	125	0.02	0.8	TO-18
2N2686A	0.28	200	125	0.02	0.80	TO-18
2N2687	0.28	30	125	0.2	1.0	TO-18
2N2688	0.28	60	125	0.2	1.0	TO-18
2N2689	0.28	100	125	0.2	1.0	TO-18
2N2690	0.28	200	125	0.2	1.0	TO-18
2N3001	0.35	30	150	0.02	0.7	TO-18



Type	Forward Current I <sub>F</sub> (Amps)	Max. For. & Max. Rev. Voltages V <sub>FOM</sub> /V <sub>ROM</sub> (Volts)	Max. Junction Temperature T <sub>J</sub> (°C)	Max. DC Gate Trigger Current I <sub>GT</sub> (mA)	DC Gate Trigger Voltage V <sub>GT</sub> (Volts)	Case Style
2N3002	0.35	60	150	0.02	0.7	TO-18
2N3003	0.35	100	150	0.02	0.7	TO-18
2N3004	0.35	200	150	0.02	0.7	TO-18
2N3005	0.35	30	150	0.2	0.8	TO-18
2N3006	0.35	60	150	0.2	0.8	TO-18
2N3007	0.35	100	150	0.2	0.8	TO-18
2N3008	0.35	200	150	0.2	0.8	TO-18
2N3228	3.2	200	100	15	2.0	TO-66
2N3525	3.2	400	100	15	2.0	TO-66
2N3555	1.6	30	150	0.020	0.7	TO-5
2N3556	1.6	60	150	0.020	0.7	TO-5
2N3557	1.6	100	150	0.020	0.7	TO-5
2N3558	1.6	200	150	0.020	0.7	TO-5
2N3559	1.6	30	150	0.20	0.8	TO-5
2N3560	1.6	60	150	0.20	0.8	TO-5
2N3561	1.6	100	150	0.20	0.8	TO-5
2N3562	1.6	200	150	0.20	0.8	TO-5
2N3870	35	100	100	40	1.6	Press-Fit
2N3871	35	200	100	40	1.6	Press-Fit
2N3872	35	400	100	40	1.6	Press-Fit
2N3873	35	600	100	40	1.6	Press-Fit
2N3896	35	100	100	40	1.6	Stud
2N3897	35	200	100	40	1.6	Stud
2N3898	35	300	100	40	1.6	Stud
2N3899	35	400	100	40	1.6	Stud
2N4144	0.250	15	150	1.0	0.8	TO-52
2N4145	0.250	30	150	1.0	0.8	TO-52
2N4146	0.250	60	150	1.0	0.8	TO-52
2N4147	0.250	100	150	1.0	0.8	TO-52
2N4148	0.250	150	150	1.0	0.8	TO-52
2N4149	0.250	200	150	1.0	0.8	TO-52
2N4320	0.250	30	125	0.5	1.0	TO-18
2N4321	0.250	60	125	0.5	1.0	TO-18
2N4322	0.250	100	125	0.5	1.0	TO-18
2N4323	0.250	150	125	0.5	1.0	TO-18
2N4324	0.250	200	125	0.5	1.0	TO-18
2N4325	0.250	250	125	0.5	1.0	TO-18
2N4326	0.390	30	100	0.5	1.0	TO-18
2N4327	0.390	60	100	0.5	1.0	TO-18
2N4328	0.390	100	100	0.5	1.0	TO-18
2N4329	0.390	150	100	0.5	1.0	TO-18
2N4330	0.390	200	100	0.5	1.0	TO-18
2N4331	0.390	250	100	0.5	1.0	TO-18
2N4332	0.390	30	125	0.01	0.8	TO-52
2N4333	0.390	60	125	0.01	0.8	TO-52
2N4334	0.390	100	125	0.01	0.8	TO-52
2N4335	0.390	150	125	0.01	0.8	TO-52
2N4336	0.390	200	125	0.01	0.8	TO-52
2N4337	0.390	250	125	0.01	0.8	TO-52
2N5060	0.8	30	125	0.2	0.8	TO-92
2N5061	0.8	60	125	0.2	0.8	TO-92
2N5062	0.8	100	125	0.2	0.8	TO-92
2N5063	0.8	150	125	0.2	0.8	TO-92
2N5064	0.8	200	125	0.2	0.8	TO-92
2N5164	20	50	100	40	1.5	Press-Fit
2N5165	20	200	100	40	1.5	Press-Fit
2N5166	20	400	100	40	1.5	Press-Fit
2N5167	20	600	100	40	1.5	Press-Fit
2N5168	20	50	100	40	1.5	Stud
2N5169	20	200	100	40	1.5	Stud
2N5170	20	400	100	40	1.5	Stud
2N5171	20	600	100	40	1.5	Stud
2N6167	20	100	100	40	1.5	ISO-Stud
2N6168	20	200	100	40	1.5	ISO-Stud
2N6169	20	400	100	40	1.5	ISO-Stud
2N6170	20	600	100	40	1.5	ISO-Stud
2N6171	35	100	100	40	1.6	ISO-Stud
2N6172	35	200	100	40	1.6	ISO-Stud
2N6173	35	400	100	40	1.6	ISO-Stud
2N6174	35	600	100	40	1.6	ISO-Stud
2N6236	4	30	100	0.2	.8	TO-126
2N6237	4	50	100	0.2	.8	TO-202
2N6238	4	100	100	0.2	.8	TO-202
2N6239	4	200	100	0.2	.8	TO-202
2N6240	4	400	100	0.2	.8	TO-202
2N6241	4	600	100	0.2	.8	TO-202
2N6394	12	50	125	30	1.5	TO-220
2N6395	12	100	125	30	1.5	TO-220
2N6396	12	200	125	30	1.5	TO-220
2N6397	12	400	125	30	1.5	TO-220
2N6398	12	600	125	30	1.5	TO-220
2N6399	12	800	125	30	1.5	TO-220
2N6400	16	50	125	30	1.5	TO-220
2N6401	16	100	125	30	1.5	TO-220
2N6402	16	200	125	30	1.5	TO-220
2N6403	16	400	125	30	1.5	TO-220
2N6404	16	600	125	30	1.5	TO-220
2N6405	16	800	125	30	1.5	TO-220

## high current silicon controlled rectifiers

**TO-83** 1/2" Stud. Flag Terminals  
**110 Amperes @ Tc Noted**

TYPE	PRV and VBO	Tc for RATED CURRENT	1 CYCLE CURRENT SURGE (PEAK AMPS)	MAX. REQ'D. GATE SIGNAL @ Tj(°C)
2N1792	50	65	1000	3V, 103mA, -40
2N1793	100	65	1000	3V, 130mA, -40
2N1794	150	65	1000	3V, 130mA, -40
2N1795	200	65	1000	3V, 130mA, -40
2N1796	250	65	1000	3V, 130mA, -40
2N1797	300	65	1000	3V, 130mA, -40
2N1798	400	65	1000	3V, 130mA, -40
2N1799	500	65	1000	3V, 130mA, -40
2N1800	600	65	1000	3V, 130mA, -40
2N1801	700	65	1000	3V, 130mA, -40
2N1802	800	65	1000	3V, 130mA, -40
2N1803	900	65	1000	3V, 200mA, -40
2N1804	1000	65	1000	3V, 200mA, -40
2N1805	500	62	1000	3V, 130mA, -40
2N1806	600	62	1000	3V, 130mA, -40
2N1807	700	62	1000	3V, 130mA, -40

**TO-94 Outline** 1/2" Stud. Flexible leads  
**110 Amperes**

TYPE	PRV and VBO	Tc for RATED CURRENT	1 CYCLE CURRENT SURGE (PEAK AMPS)	MAX. REQ'D. GATE SIGNAL @ Tj(°C)
2N1908	25	62	1000	3V, 130mA, -40
2N1910	50	62	1000	3V, 130mA, -40
2N1911	100	62	1000	3V, 130mA, -40
2N1912	150	62	1000	3V, 130mA, -40
2N1913	200	62	1000	3V, 130mA, -40
2N1914	250	62	1000	3V, 130mA, -40
2N1915	300	62	1000	3V, 130mA, -62
2N1916	400	62	1000	3V, 130mA, -62
2N2023	25	85	1000	3V, 150mA, -65
2N2024	50	85	1000	3V, 150mA, -65
2N2025	100	85	1000	3V, 150mA, -65
2N2026	150	85	1000	3V, 150mA, -65
2N2027	200	85	1000	3V, 150mA, -65
2N2028	250	85	1000	3V, 150mA, -65
2N2029	300	85	1000	3V, 150mA, -65
2N2030	400	85	1000	3V, 150mA, -65
2N2031	50	60	1000	3V, 130mA, -40
2N3091	600	62	1000	3V, 200mA, -40
2N3092	700	62	1000	3V, 200mA, -40
2N3093	800	62	1000	3V, 200mA, -40
2N3094	900	62	1000	3V, 200mA, -40
2N3095	1000	62	1000	3V, 200mA, -40
2N3096	1100	62	1000	3V, 200mA, -40
2N3097	1200	62	1000	3V, 200mA, -40
2N3098	1300	62	1000	3V, 200mA, -40
2N3099	600	62	1000	3V, 200mA, -40
2N3100	700	62	1000	3V, 200mA, -40
2N3101	800	62	1000	3V, 200mA, -40
2N3102	900	62	1000	3V, 200mA, -40
2N3103	1000	62	1000	3V, 200mA, -40
2N3104	1100	62	1000	3V, 200mA, -40
2N3105	1200	62	1000	3V, 200mA, -40
2N3106	1300	62	1000	3V, 200mA, -40
2N4361	100	82	1600	5V, 250mA, -40
2N4362	200	82	1600	5V, 250mA, -40

**TO-94 Outline** 1/2" Stud. Flexible leads  
**110 Amperes**

TYPE	PRV and VBO	Tc for RATED CURRENT	1 CYCLE CURRENT SURGE (PEAK AMPS)	MAX. REQ'D. GATE SIGNAL @ Tj(°C)
2N4363	400	82	1600	5V, 250mA, -40
2N4364	600	82	1600	5V, 250mA, -40
2N4365	800	82	1600	5V, 250mA, -40
2N4366	1000	82	1600	5V, 250mA, -40
2N4367	1200	82	1600	5V, 250mA, -40
2N4368	1400	82	1600	5V, 250mA, -40
2N4371	100	82	1600	5V, 250mA, -40
2N4372	200	82	1600	5V, 250mA, -40
2N4373	400	82	1600	5V, 250mA, -40
2N4374	600	82	1600	5V, 250mA, -40
2N4375	800	82	1600	5V, 250mA, -40
2N4376	1000	82	1600	5V, 250mA, -40
2N4377	1200	82	1600	5V, 250mA, -40
2N4378	1400	82	1600	5V, 250mA, -40

**TO-93** 3/4" stud. flexible leads  
**235 AMPS @ Tc Noted**

TYPE	PRV and VBO	Tc for RATED CURRENT	1 CYCLE CURRENT SURGE (PEAK AMPS)	MAX. REQ'D. GATE SIGNAL @ Tj(°C)
2N2503	50	80	3500	3V, 150mA, -40
2N2504	100	80	3500	3V, 150mA, -40
2N2505	200	80	3500	3V, 150mA, -40
2N2506	300	80	3500	3V, 150mA, -40
2N2507	400	80	3500	3V, 150mA, -40
2N2508	500	80	3500	3V, 150mA, -40

**275 AMPS @ Tc Noted**

TYPE	PRV and VBO	Tc for RATED CURRENT	1 CYCLE CURRENT SURGE (PEAK AMPS)	MAX. REQ'D. GATE SIGNAL @ Tj(°C)
2N3884	50	80	4500	4V, 400mA, -40
2N3885	100	80	4500	4V, 400mA, -40
2N3886	200	80	4500	4V, 400mA, -40
2N3887	300	80	4500	4V, 400mA, -40
2N3888	400	80	4500	4V, 400mA, -40
2N3889	500	80	4500	4V, 400mA, -40
2N3890	600	80	4500	4V, 400mA, -40
2N3891	700	80	4500	4V, 400mA, -40
2N3892	800	80	4500	4V, 400mA, -40
2N3893	900	80	4500	4V, 400mA, -40
2N3894	1000	80	4500	4V, 400mA, -40
2N3895	1200	80	4500	4V, 400mA, -40