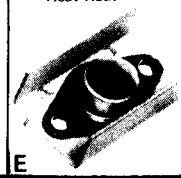
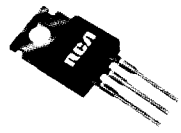
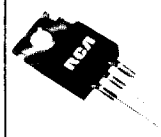
SCR Product Matrix

RCA SCR's		TO-8  N		D	TO-66 						TO 66 With Heat Rad.  E	
$I_{T(RMS)}$		2A	4.5A	5A	FTO* 5A	FTO* 5A	FTO* 5A	FTO* 5A	FTO* 5A	FTO* 5A	5A	FTO* 5A
I_{TSM} (60 Hz)		60A	200A	60A	80A	80A	80A	75A(IPM)	80A	80A	80A	80A
V_{DROM} / V_{RROM} (V)	15											
	25											
	30											
	50											
	100		S2400A				S3704A					S3714A
	150											
	200	2N3528	S2400B	2N3228		S3700B	S3704B				S2710B	S3714B
	250											
	300											
	400	2N3529	S2400D	2N3525		S3700D	S3704D				S2710D	S3714D
	500				S3706E							
	600	2N4102	S2400M	2N4101	S3705M	S3700M	S3704M	S3701M			S2710M	S3714M
	700						S3704S		S3702S			S3714S
	750									S3703SF		
	800											
I_{GT}(mA)		15	15	15	30	40	40	35	45	40	15	40
V_{GT}(V)		2	2	2	4	3.5	3.5	4	4	4	2	3.5
	File No.	114	567	114	839	306	690	476	522	522	266	690

* FTO – Fast Turn-Off

RCA SCR's		Low Profile Mod. TO-5  A-2	TO-5 With Heat Rad.  B-2	TO-5 With Heat Spreader  C-2	TO-220AB  VERSAWATT F					TO-220AB F  VERSAWATT
$I_{T(RMS)}$		7A	3.3A	7A	4A	4A	4A	8A	10A	12
I_{TSM} (60 Hz)		100A	100A	100A	35A	35A	35A	100A	100A	125
V_{DROM} / V_{RROM}(V)	15				S2060Q	S2061Q	S2062Q			
	25									
	30				S2060Y	S2061Y	S2062Y			
	50				S2060F	S2061F	S2062F	S122F	S2800F	2N6394
	100				S2060A	S2061A	S2062A	S122A	S2800A	2N6395
	150									
	200	S2600B	S2610B	S2620B	S2060B	S2061B	S2062B	S122B	S2800B	2N6396
	250									
	300				S2060C	S2061C	S2062C	S122C	S2800C	S6000C
	400	S2600D	S2610D	S2620D	S2060D	S2061D	S2062D	S122D	S2800D	2N6397
	500				S2060E	S2061E	S2062E	S122E	S2800E	S6000E
	600	S2600M	S2610M	S2620M	S2060M	S2061M	S2062M	S122M	S2800M	2N6398
	700							S122S	S2800S	S6000S
	750									
	800									
I_{GT}(mA)		15	15	15	0.2	0.5	2	25	15	30
V_{GT}(V)		1.5	1.5	1.5	0.8	0.8	0.8	1.5	1.5	1.5
	File No.	496	496	496	654	654	654	889	890	891

* FTO – Fast Turn-Off

Application Information (continued)

SCR's

Current $I_{T(RMS)}$-A	Voltage Range - V	Package	Series	Typical Applications
LOW-CURRENT SENSITIVE-GATE				
4	15-600	TO-220AB (VERSAWATT)	S2060 S2061 S2062	Logic Interface to Power Control
GENERAL PURPOSE PHASE CONTROL				
2	200-600	TO-8	2N4102	Fuel Igniters
3.3	200-600	Mod. TO-5 w Rad.	S2610	CD Ignition
4.5	100-600	TO-8	S2400	CD Ignition, "Crowbars"
7	200-600	Mod. TO-5	S2600	CD Ignition
7	200-600	Mod. TO-5 2 Spdr.	S2620	
1.7	200-600	TO-66 w Rad.	S2710	
5	200-600	TO-66	2N4101	Small Motor Control
8	50-700	TO-220AB (VERSAWATT)	S122	CD Ignition, Regulators, Small Motor Control, and General Purpose
10	50-700	TO-220AB (VERSAWATT)	S2800	
12	50-700	TO-220AB (VERSAWATT)	2N6394-2N6398 S6000 C, E, S	
12.5	100-600	TO-3	2N4103	General Purpose
16	25-500	TO-48	2N1850A	
16	50-700	TO-220AB (VERSAWATT)	2N6400-2N6404 S6100C, E, S	CD Ignition, Regulators, "Crow bars" Small Motor Control, and General Purpose
20	100-600	Press-Fit	S6200	General Purpose
20	100-600	Stud	S6210	
20	100-600	Isolated-Stud	S6220	
20	100-600	PF, Flex. Id, Encap. Iso-stud	S6230	
20	100-600	PF, Isolated on TO-3 Flge.	S6240	
20	100-600	PF, Flex. Id, Encap. Iso-TO-3 Flge.	S6250	
25	25-600	TO-48	2N690	
35	100-800	Press-Fit	2N3873 S6400	
35	100-800	Stud	2N3899 S6410	
35	100-800	Isolated-Stud	S6420	
35	100-800	PF, Flex. Id, Encap. Iso-stud	S6430	
35	100-800	PF, Isolated on TO-3 Flge.	S6440	
35	100-800	PF, Flex. Id, Encap. Iso-TO-3 Flge.	S6450	
INVERTERS				
5	200-600	TO-66	S3700	High-Frequency Power Supplies
5	600	TO-66	S3701	Laser Diode Driver
5	700-750	TO-66	S3702 S3703	110° TV Deflection
5	100-700	TO-66 & TO-66 w Rad.	S3704 S3714	Inverters, Choppers
5	600	TO-66	S3705 S3706	90° TV Deflection
35	600	TO-48	S6493	Pulse Modulators
35	50-600	TO-48	2N3653 S7410	Inverters, Choppers
			2N3658 S7412	

ITR's

TV HORIZONTAL DEFLECTION				
8	450-750	TO-220AB (VERSAWATT)	TAS3900	Trace Switch
8	300-700	TO-220AB (VERSAWATT)	TAS3901	Commutating (Retrace) Switch

GTO's

8.5*	100-600	TO-3	G5001	High-, Medium, and Low- Frequency Power-Switching Applications
8.5*	100-600	TO-3	G5002	
8.5*	100-600	TO-3	G5003	

*$I_{T(DC)}$ value

SCR's (continued)

RCA TYPE	Current I_T (RMS) A	I_{TSM} A	Temp., T_C °C	Package (See p. 28)	Voltage V_{DROM} V_{RROM} V	Temp. Range Operating °C	Max, Gate Trigger Characteristic I_{GT} mA	V_{GT} V	Critical Rate of Rise of Off-State Voltage dv/dt - V/μs Min.	Typ.	T_C-°C	Max. Instantaneous Holding Current i_{HO}-mA	T_C-°C	Thermal Resistance $R_{\theta JC}$ °C/W
GENERAL-PURPOSE SCR's														
S22 types														
2N3528	2	60	25●	N	200	-40 to 100	15	2	10	200	100	20	25	40▲
2N3529	2	60	25●	N	400	-40 to 100	15	2	10	200	100	20	25	40▲
2N4102	2	60	25●	N	600	-40 to 100	15	2	10	200	100	20	25	40▲
S24 types														
S2400A	4.5	200	75	N	100	-40 to 100	15	2	10	100	100	20	25	5
S2400B	4.5	200	75	N	200	-40 to 100	15	2	10	100	100	20	25	5
S2400D	4.5	200	75	N	400	-40 to 100	15	2	10	100	100	20	25	5
S2400M	4.5	200	75	N	600	-40 to 100	15	2	10	100	100	20	25	5
S26 types														
S2600B	7	100	60	A-2	200	-65 to 100	15	1.5	20	200	100	20	25	5
S2600D	7	100	60	A-2	400	-65 to 100	15	1.5	20	200	100	20	25	5
S2600M	7	100	60	A-2	600	-65 to 100	15	1.5	20	200	100	20	25	5
S2620B	7	100	50‡	C-2	200	-65 to 100	15	1.5	20	200	100	20	25	7◆
S2620D	7	100	50‡	C-2	400	-65 to 100	15	1.5	20	200	100	20	25	7◆
S2620M	7	100	50‡	C-2	600	-65 to 100	15	1.5	20	200	100	20	25	7◆
S2610B	3.3	100	25●	B-2	200	-65 to 100	15	1.5	20	200	100	20	25	35▲
S2610D	3.3	100	25●	B-2	400	-65 to 100	15	1.5	20	200	100	20	25	35▲
S2610M	3.3	100	25●	B-2	600	-65 to 100	15	1.5	20	200	100	20	25	35▲
S27 types														
2N3228	5	60	75	D	200	-40 to 100	15	2	10	200	100	20	25	4
2N3525	5	60	75	D	400	-40 to 100	15	2	10	200	100	20	25	4
2N4101	5	60	75	D	600	-40 to 100	15	2	10	200	100	20	25	4
S2710B	1.7	60	25●	E	200	-40 to 100	15	2	10	200	100	20	25	28▲
S2710D	1.7	60	25●	E	400	-40 to 100	15	2	10	200	100	20	25	28▲
S2710M	1.7	60	25●	E	600	-40 to 100	15	2	10	200	100	20	25	28▲
S28 types														
S122F	8	100	80	F	50	-65 to 100	25	1.5	10	100	100	30	25	2.2
S122A	8	100	80	F	100	-65 to 100	25	1.5	10	100	100	30	25	2.2
S122B	8	100	80	F	200	-65 to 100	25	1.5	10	100	100	30	25	2.2
S122C	8	100	80	F	300	-65 to 100	25	1.5	10	100	100	30	25	2.2
S122D	8	100	80	F	400	-65 to 100	25	1.5	10	100	100	30	25	2.2
S122E	8	100	80	F	500	-65 to 100	25	1.5	10	100	100	30	25	2.2
S122M	8	100	80	F	600	-65 to 100	25	1.5	10	100	100	30	25	2.2
S122S	8	100	80	F	700	-65 to 100	25	1.5	10	100	100	30	25	2.2
S2800F	10	100	80	F	50	-65 to 100	15	1.5	100	–	100	20	25	2
S2800A	10	100	80	F	100	-65 to 100	15	1.5	75	–	100	20	25	2
S2800B	10	100	80	F	200	-65 to 100	15	1.5	50	–	100	20	25	2
S2800C	10	100	80	F	300	-65 to 100	15	1.5	40	–	100	20	25	2
S2800D	10	100	80	F	400	-65 to 100	15	1.5	30	–	100	20	25	2
S2800E	10	100	80	F	500	-65 to 100	15	1.5	25	–	100	20	25	2
S2800M	10	100	80	F	600	-65 to 100	15	1.5	20	–	100	20	25	2
S2800S	10	100	80	F	700	-65 to 100	15	1.5	15	–	100	20	25	2
S40 types														
2N3668	12.5	200	80	P	100	-40 to 100	40	2	10	100	100	50	25	1.7
2N3669	12.5	200	80	P	200	-40 to 100	40	2	10	100	100	50	25	1.7
2N3670	12.5	200	80	P	400	-40 to 100	40	2	10	100	100	50	25	1.7
2N4103	12.5	200	80	P	600	-40 to 100	40	2	10	100	100	50	25	1.7

● Ambient Temperature (T_A) ▲Junction-to-Ambient ($R_{\theta JA}$) ‡ Heat-Spreader Temperature (T_{HS}) ◆ Junction-to-Heat Spreader ($R_{\theta JHS}$)