

SCR Product Matrix

RCA SCR's	TO-8			TO-66						TO 66 With Heat Rad.	
	N		D							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(1PM)	80A	80A	80A	80A
V_{DROM}	15										
V_{RRM} (V)	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	TO-5 With Heat Rad.	TO-5 With Heat Spreader	TO-220AB					F	TO-220AB
	A-2	B-2	C-2	VERSAWATT					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}	15			S2060Q	S2061Q	S2062Q				
V_{RRM} (V)	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
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LOW-CURRENT SENSITIVE-GATE

4	15-600	TO-220AB (VERSAWATT)	S2060 S2061 S2062	Logic Interface to Power Control
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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	CD Ignition, Regulators, "Crow bars" Small Motor Control, and General Purpose
16	50-700	TO-220AB (VERSAWATT)	2N6400-2N6404 S6100C, E, S	
20	100-600	Press-Fit	S6200	
20	100-600	Stud	S6210	General Purpose
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 2N3658 S7412	Inverters, Choppers

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-
8.5*	100-600	TO-3	G5002	Frequency Power-Switching
8.5*	100-600	TO-3	G5003	Applications

*I_{T(DC)} value

SCR's (continued)

RCA TYPE	Current			Package (See p. 28)	Voltage VDROM VRROM V	Temp. Range Operating °C	Max. Gate Trigger Characteristic		Critical Rate of Rise of Off-State Voltage dv/dt - V/μs			Max. Instantaneous Holding Current		Thermal Resistance RθJC °C/W
	IT (RMS) A	ITSM A	Temp., TC °C				IGT mA	VGT V	Min.	Typ.	TC-°C	iHO-mA	TC-°C	

GENERAL-PURPOSE SCR's (continued)

S60 types

2N6394	12	125	90	F	50	-40 to 125	30	1.5	50	—	125	35	25	2
2N6395	12	125	90	F	100	-40 to 125	30	1.5	50	—	125	35	25	2
2N6396	12	125	90	F	200	-40 to 125	30	1.5	50	—	125	35	25	2
S6000C	12	125	90	F	300	-40 to 125	30	1.5	50	—	125	35	25	2
2N6397	12	125	90	F	400	-40 to 125	30	1.5	50	—	125	35	25	2
S6000E	12	125	90	F	500	-40 to 125	30	1.5	50	—	125	35	25	2
2N6398	12	125	90	F	600	-40 to 125	30	1.5	50	—	125	35	25	2
S6000S	12	125	90	F	700	-40 to 125	30	1.5	50	—	125	35	25	2

S61 types

2N6400	16	160	100	F	50	-40 to 125	30	1.5	50	—	125	35	25	1.5
2N6401	16	160	100	F	100	-40 to 125	30	1.5	50	—	125	35	25	1.5
2N6402	16	160	100	F	200	-40 to 125	30	1.5	50	—	125	35	25	1.5
S6100C	16	160	100	F	300	-40 to 125	30	1.5	50	—	125	35	25	1.5
2N6403	16	160	100	F	400	-40 to 125	30	1.5	50	—	125	35	25	1.5
S6100E	16	160	100	F	500	-40 to 125	30	1.5	50	—	125	35	25	1.5
2N6404	16	160	100	F	600	-40 to 125	30	1.5	50	—	125	35	25	1.5
S6100S	16	160	100	F	700	-40 to 125	30	1.5	50	—	125	35	25	1.5

S62 types

S6200A	20	200	75	G	100	-65 to 100	15	2	10	100	100	20	25	1.2
S6200B	20	200	75	G	200	-65 to 100	15	2	10	150	100	20	25	1.2
S6200D	20	200	75	G	400	-65 to 100	15	2	10	150	100	20	25	1.2
S6200M	20	200	75	G	600	-65 to 100	15	2	10	75	100	20	25	1.2

S6210A	20	200	75	H	100	-65 to 100	15	2	10	100	100	20	25	1.2
S6210B	20	200	75	H	200	-65 to 100	15	2	10	150	100	20	25	1.2
S6210D	20	200	75	H	400	-65 to 100	15	2	10	100	100	20	25	1.2
S6210M	20	200	75	H	600	-65 to 100	15	2	10	75	75	20	25	1.2

S6220A	20	200	75	J	100	-65 to 100	15	2	10	100	100	20	25	1.4
S6220B	20	200	75	J	200	-65 to 100	15	2	10	150	100	20	25	1.4
S6220D	20	200	75	J	400	-65 to 100	15	2	10	100	100	20	25	1.4
S6220M	20	200	75	J	600	-65 to 100	15	2	10	75	100	20	25	1.4

S6230A	20	200	70	AA	100	-65 to 100	15	2	10	100	100	20	25	1.4
S6230B	20	200	70	AA	200	-65 to 100	15	2	10	150	100	20	25	1.4
S6230D	20	200	70	AA	400	-65 to 100	15	2	10	100	100	20	25	1.4
S6230M	20	200	70	AA	600	-65 to 100	15	2	10	75	100	20	25	1.4

S6240A	20	200	70	BB	100	-65 to 100	15	2	10	100	100	20	25	1.4
S6240B	20	200	70	BB	200	-65 to 100	15	2	10	150	100	20	25	1.4
S6240D	20	200	70	BB	400	-65 to 100	15	2	10	100	100	20	25	1.4
S6240M	20	200	70	BB	600	-65 to 100	15	2	10	75	100	20	25	1.4

S6250A	20	200	70	CC	100	-65 to 100	15	2	10	100	100	20	25	1.4
S6250B	20	200	70	CC	200	-65 to 100	15	2	10	150	100	20	25	1.4
S6250D	20	200	70	CC	400	-65 to 100	15	2	10	100	100	20	25	1.4
S6250M	20	200	70	CC	600	-65 to 100	15	2	10	75	100	20	25	1.4

S64 types

2N1842A	16	125	80	Q	25	-65 to 125	45	3.5	10	40	125	8*	125	2
2N1843A	16	125	80	Q	50	-65 to 125	45	3.5	10	40	125	8*	125	2
2N1844A	16	125	80	Q	100	-65 to 125	45	3.5	10	40	125	8*	125	2
2N1845A	16	125	80	Q	150	-65 to 125	45	3.5	10	40	125	8*	125	2
2N1846A	16	125	80	Q	200	-65 to 125	45	3.5	10	40	125	8*	125	2
2N1847A	16	125	80	Q	250	-65 to 125	45	3.5	10	40	125	8*	125	2
2N1848A	16	125	80	Q	300	-65 to 125	45	3.5	10	40	125	8*	125	2
2N1849A	16	125	80	Q	400	-65 to 125	45	3.5	10	40	125	8*	125	2
2N1850A	16	125	80	Q	500	-65 to 125	45	3.5	10	40	125	8*	125	2

* Typical value