RCA

SEMICONDUCTOR PRODUCT GUIDE

TRANSISTORS · TUNNEL DIODES
MICROCIRCUITS · RECTIFIERS
SILICON CONTROLLED RECTIFIERS

Authorized RCA Distributor

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(X) Not recommended for new equipment design.

(R) Reverse-polarity version available.

†Military version available. See page 9 for listing of RCA Military –specification types. **Contact your RCA Field Office.

CHECK PAGE 10 FOR NEW RCA TYPES NOT INCLUDED IN THIS LIST.

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AUDIO-FREQUENCY APPLICATIONS

SMALL SIGNAL—Class A

2N104	2N215	2N1010	2N2613
2N175	2N220	2N2102▲	2N2614

DRIVER

2N405	2N406	2N591	●2N2102▲

LARGE SIGNAL—Classes A and B

2N109	2N270	2N408	2N649
2N217	2N407	2N647	●2N2102▲

POWER AMPLIFIER

Dissipations—Up to 4.9 Watts

●2N497	●2N1049	●2N1492	●2N1613
●2N656	●2N1491	●2N1493	●2N1711
●2N699			

Dissipations—5 to 49.9 Watts

2N176	2N1183A	●2N1482	●2N1769
2N301	2N1183B	●2N1483	●2N2102
2N301A	2N1184	●2N1484	2N2147
2N351	2N1184A	●2N1485	2N2148
2N376	2N1184B	●2N1486	●2N2270
●2N1067	●2N1479	●2N1700	●2N2339
●2N1068	●2N1480	●2N1701	
2N1183	●2N1481	●2N1768	

Dissipations—50 Watts and Higher

2N173	●2N1070	●2N1490	2N1906
2N174	2N1099	●2N1511	●2N2015
2N277	2N1100	●2N1512	●2N2016
2N278	2N1358	●2N1513	●2N2338
2N441	2N1412	●2N1514	
2N442	●2N1487	●2N1702	
2N443	●2N1488	●2N1703	
●2N1069	●2N1489	2N1905	

RADIO-FREQUENCY APPLICATIONS

VHF AMPLIFIER

2N384	2N1066	2N1396	●2N1492
●2N699	2N1177	2N1397	●2N1493
●2N914	2N1225	●2N1491	2N2482
2N1023			●2N2708

HF AMPLIFIER

2N274	2N1066	2N1396	2N1631
2N370	2N1224	2N1397	2N1632
2N384	2N1225	●2N1491	2N1637
●2N708	2N1226	●2N1492	2N2273
2N1023	2N1395	●2N1493	

MIXER

2N274	2N1066	2N1225	2N1396
2N372	2N1179	2N1226	2N1397
2N384	2N1224	2N1395	●2N2708

OSCILLATOR

2N274	2N1066	2N1225	2N1396
2N372	2N1178	2N1226	2N1397
2N384	2N1224	2N1395	●2N2708
2N1023			

CONVERTER

2N140	2N411	2N1225	2N1526
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2N274	2N1023	2N1395	2N1639
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2N384	2N1224	2N1397	

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2N218	2N410	2N1225	2N1524
2N274	2N1023	2N1226	2N1525
2N373	2N1066	2N1395	2N1638
2N384	2N1180	2N1396	

VIDEO-AMPLIFIER APPLICATIONS

2N274	2N1066	2N1395	●2N1492
2N384	2N1224	2N1396	●2N1493
2N699	2N1225	2N1397	●2N2102
2N1023	2N1226	●2N1491	

COMPUTER SWITCHING APPLICATIONS

Stage Delays Greater than 300 Nanoseconds[a]

2N398	2N398A	2N398B	2N586

Stage Delays of 100 to 300 Nanoseconds[a]

2N269	2N414	2N1090	2N1307
2N388	2N578	2N1091	2N1308
2N388A	2N579	2N1169[b]	2N1309
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2N404	2N584	2N1305	
2N404A	2N585	2N1306	

Stage Delays of 30 to 100 Nanoseconds[a]

●2N696	2N1213[c]	2N1300	2N1853
●2N697	2N1214[c]	2N1301	2N1854
2N794	2N1215[c]	2N1384	●2N2476
2N795	2N1216[c]	2N1683	●2N2477
2N796			

Stage Delays of 10 to 30 Nanoseconds[a]

2N643	●2N706	2N711	2N1450
2N644	●2N706A	2N828	●2N1708
2N645	●2N708	●2N834	●2N2205
2N705	2N710	●2N914	●2N2206

Stage Delays of 5 to 10 Nanoseconds[a]

●2N709	2N955	2N955A	●2N2475

POWER SWITCHING APPLICATIONS

Dissipations—Up to 4.9 Watts

●2N497	●2N706	●2N1092	●2N2206
●2N656	●2N706A	●2N1613	●2N2476
●2N696	●2N708	●2N1708	●2N2477
●2N697	●2N834	●2N1711	
●2N699	●2N914	●2N2205	

Dissipations—5 to 49.9 Watts

●2N1067	2N1184A	●2N1483	●2N1768
●2N1068	2N1184B	●2N1484	●2N1769
2N1183	●2N1479	●2N1485	●2N2102
2N1183A	●2N1480	●2N1486	●2N2270
2N1183B	●2N1481	●2N1700	●2N2339
2N1184	●2N1482	●2N1701	

Dissipations—50 Watts and Higher

2N173	●2N1069	●2N1488	●2N1702
2N174	●2N1070	●2N1489	●2N1703
2N277	2N1099	●2N1490	2N1905
2N278	2N1100	●2N1511	2N1906
2N441	2N1358	●2N1512	●2N2015
2N442	2N1412	●2N1513	●2N2016
2N443	●2N1487	●2N1514	●2N2338

● Silicon type. ▲ Industrial and Military Applications. [a] Measured in resistor-capacitor-transistor logic circuit except for drift-transistor types 2N643, 2N644, 2N645, and 2N1450 which are measured in transistor-current-steering logic circuit. Nanoseconds = 10-9 seconds. [b] Bidirectional type. [c] Thyristor type.

RCA POWER SWITCHING TRANSISTORS

RCA Type p-n-p	Material and Const.	JEDEC Pkg.	Max. P_T (case)	CHARACTERISTICS: Min. V_{CEX}	Min. V_{CE} (sus)	Min. h_{FE}	Max. V_{CE} (sat)	Typ. f_T
			Watts	Volts	Volts	h_{FE} @ I_C Amp	Volts @ I_C Amp	Mc
MEDIUM-POWER TYPES							P_T: 2 to 5 watts	
2N1092†	Si	DJ	TO-5	2	60○	-	15 @ 0.2 a	2 @ 0.2 a	1.5■
2N699†	Si	♠	TO-5	2	80⊕	80	40 @ 0.15a	5 @ 0.15 a	50↓
2N1613†	Si	♠	TO-5	3	50	-	35 @ .01 a	1.5 @ 0.15 a	60↓
2N656†	Si	DJ	TO-5	4	60★	-	30 @ 0.2 a	13.5 @ 0.2 a	-
2N1067†	Si	DJ	TO-8	5	60○	-	15 @ 0.2 a	2 @ 0.2 a	1.5■
2N1479†▲	Si	DJ	TO-5	5	60	40	20 @ 0.2 a	1.4 @ 0.2 a	1.5■
2N1481†▲	Si	DJ	TO-5	5	60	40	35 @ 0.2 a	1.4 @ 0.2 a	1.5■
2N1700†	Si	DJ	TO-5	5	60	40	20 @ 0.1 a	1 @ 0.1 a	-
2N2270†	Si	♠	TO-5	5	60	45	35 @ .001a	0.9 @ 0.15 a	60↓
2N1480†▲	Si	DJ	TO-5	5	100	55	20 @ 0.2 a	1.4 @ 0.2 a	1.5■
2N1482†▲	Si	DJ	TO-5	5	100	55	35 @ 0.2 a	1.4 @ 0.2 a	1.5■
2N2102†	Si	♠	TO-5	5	80	65	35 @ .01 a	0.5 @ 0.15 a	60↓
INTERMEDIATE POWER TYPES							P_T: 7.5 to 40 watts	
2N1183▲	Ge	Alloy	TO-8	7.5⊕	-45	-	20 @ -0.4a	-0.5 @ -0.4 a	0.5■↓
2N1184▲	Ge	Alloy	TO-8	7.5⊕	-45	-	40 @ -0.4a	-0.5 @ -0.4 a	0.5■↓
2N1183A▲	Ge	Alloy	TO-8	7.5⊕	-60	-	20 @ -0.4a	-0.5 @ -0.4 a	0.5■↓
2N1184A▲	Ge	Alloy	TO-8	7.5⊕	-60	-	40 @ -0.4a	-0.5 @ -0.4 a	0.5■↓
2N1183B▲	Ge	Alloy	TO-8	7.5⊕	-80	-	20 @ -0.4a	-0.5 @ -0.4 a	0.5■↓
2N1184B▲	Ge	Alloy	TO-8	7.5⊕	-80	-	40 @ -0.4a	-0.5 @ -0.4 a	0.5■↓
2N1068†	Si	DJ	TO-8	10	60○	-	15 @ 0.2 a	2 @ 0.75 a	1.5■
2N2147	Ge	Drift Field	TO-3	12.5	-50	-	100 @ 1 a	-70 μa max.♦	4
2N2148	Ge	Drift Field	TO-3	12.5	-40	-	40 @ 1 a	-100μa max.♦	3
2N1483†▲	Si	DJ	TO-8	25	60	40	20 @ 0.75a	2 @ 0.75 a	1.25■
2N1485†▲	Si	DJ	TO-8	25	60	40	35 @ 0.75a	0.75 @ 0.75 a	1.25■
2N1701†	Si	DJ	TO-8	25	60	40	20 @ 0.3 a	1.5 @ 0.3 a	-
2N1484†▲	Si	DJ	TO-8	25	100	55	20 @ 0.75a	2 @ 0.75 a	1.25■
2N1486†▲	Si	DJ	TO-8	25	100	55	35 @ 0.75a	0.75 @ 0.75 a	1.25■
2N1768†	Si	DJ	Offset Stud	40	60	40	35 @ 0.75a	0.75 @ 0.75 a	1.25■
2N2339†	Si	DJ	Offset Stud	40	60	40	20 @ 0.3 a	1.5 @ 3 a	-
2N1769†	Si	DJ	Offset Stud	40	100	55	35 @ 0.75a	0.75 @ 0.75 a	1.25■

RCA Type p-n-p	Material and Const.	JEDEC Pkg.	Max. P_T (case)	CHARACTERISTICS: Min. V_{CEX}	Min. V_{CE} (sus)	Min. h_{FE}	Max. V_{CE} (sat)	Typ. f_T
			Watts	Volts	Volts	h_{FE} @ I_C Amp	Volts @ I_C Amp	Mc
HIGH POWER TYPES							P_T: 50 to 150 watts	
2N1069†	Si	DJ	TO-3	50	60○	-	10 @ 1.5 a	3 @ 1.5 a	1.2■
2N1070†	Si	DJ	TO-3	50	60○	-	20 @ 1.5 a	1 @ 1.5 a	1.2■
2N1487†	Si	DJ	TO-3	75	60	40	15 @ 1.5 a	3 @ 1.5 a	1■
2N1489†	Si	DJ	TO-3	75	60	40	25 @ 1.5 a	3 @ 1.5 a	1■
2N1511†	Si	DJ	TO-36	75	60	40	15 @ 1.5 a	3 @ 1.5 a	1■
2N1513†▲	Si	DJ	TO-36	75	60	40	25 @ 1.5 a	1 @ 1.5 a	1■
2N1702†	Si	DJ	TO-3	75	60	40	15 @ 0.8 a	3.2 @ 0.8 a	-
2N1703†	Si	DJ	TO-36	75	60	40	15 @ 0.8 a	3.2 @ 0.8 a	-
2N1488†	Si	DJ	TO-3	75	100	55	15 @ 1.5 a	3 @ 1.5 a	1■
2N1490†	Si	DJ	TO-3	75	100	55	25 @ 1.5 a	1 @ 1.5 a	1■
2N1512†	Si	DJ	TO-36	75	100	55	15 @ 1.5 a	3 @ 1.5 a	1
2N1514†▲	Si	DJ	TO-36	75	100	55	25 @ 1.5 a	1 @ 1.5 a	1
2N277	Ge	Alloy	TO-36	150⊕	-40	-	35 @ -5 a	-0.7 @ -12 a	10♦
2N441	Ge	Alloy	TO-36	150⊕	-40	-	20 @ -5 a	-0.7 @ -12 a	10♦
2N278	Ge	Alloy	TO-36	150⊕	-50	-	35 @ -5 a	-0.7 @ -12 a	10♦
2N442	Ge	Alloy	TO-36	150⊕	-50	-	20 @ -5 a	-0.7 @ -12 a	10♦
2N173	Ge	Alloy	TO-36	150⊕	-60	-	35 @ -5 a	-0.7 @ -12 a	10♦
2N174▲	Ge	Alloy	TO-36	150⊕	-60	-	25 @ -5 a	-0.7 @ -12 a	10♦
2N443	Ge	Alloy	TO-36	150⊕	-60	-	20 @ -5 a	-0.7 @ -12 a	10♦
2N1099	Ge	Alloy	TO-36	150⊕	-	-	35 @ -5 a	-0.3 @ -12 a	10♦
2N1100	Ge	Alloy	TO-36	150⊕	-	-	25 @ -5 a	-0.3 @ -12 a	10♦
2N1358	Ge	Alloy	TO-36	150⊕	-	-	25 @ -0.5a	-0.7 @ -12 a	100♦↓
2N1412	Ge	Alloy	TO-36	150⊕	-	-	25 @ -0.5a	-0.7 @ -12 a	10♦
2N2338†	Si	DJ	TO-36	150	60	40	15 @ 3 a	1.5 @ 3 a	-
2N2015†	Si	DJ	TO-36	150	100	50↑	15 @ 5 a	1.25 @ 5 a	25 kc♦
2N2016†	Si	DJ	TO-36	150	130	65↑	15 @ 5 a	1.25 @ 5 a	25 kc♦
VHF AMPLIFIER TRANSISTORS							P_T: 0.2 watt & 3 watts; Frequency: to 500 Mc	
2N1491†	Si	DDM	TO-39	3	30	-	50** @ .015a	15db●●	250■
2N1492†	Si	DDM	TO-39	3	60	-	50** @ .015a	15db▲▲	275■
2N1493†	Si	DDM	TO-39	3	100	-	50** @ .015a	16db●●	300■
2N2708†	Si	DDPE	TO-18	.2★★	35★	-	30** @ .015a	15db●	700↓

▲ military version also available
† n-p-n type
● at 200 Mc
♠ triple-diffused planar
▲▲ typical power gain at 70 mc for 100 mw output
★★ free-air temp.
⊕ heat sink
↑ maximum
↓ minimum
★ BV_{CEO}
○ V_{CES}
⊕ V_{CER}
** typical small-signal current transferratio
●● typical power gain at 70 mc for 10 mw output
DJ = diffused-junction
♦ beta-cutoff frequency
■ alpha-cutoff frequency
♦ I_{CBO} (sat)
DDM = double diffused mesa

RCA TRANSISTORS FOR RF, IF, SMALL-SIGNAL, LARGE-SIGNAL, AMPLIFIER APPLICATIONS

RCA Type	Material and Const.	JEDEC Pkg.	TYPICAL OPERATING FREQUENCY and Max. P_g		Typ. f_{hfb}	Typ. h_{fe} @ I_C		Max. V_{CB}
			Mc	db	Mc	h_{fe}	ma	volts
TYPES FOR IF AND RF AMPLIFIER SERVICE								Frequency of Application: 0.262 to 200 Mc
2N2708†	Si DDEP	TO-18	200	15	700*	30↓	2	35
2N2482†	Ge Mesa	TO-18	100	12	300*	25↓	2	20
2N2273	Ge Mesa	TO-18	100	12	300*	20↓	-1	-25
2N1177	Ge Drift Field	TO-45	100	14	140	100	-1	-30
2N1023	Ge Drift Field	TO-44	50	24	120	60	-1	-40
2N1066	Ge Drift Field	TO-33	50	24	120	60	-1.5	-40
2N1397	Ge Drift Field	TO-33	50	24	120	90	-1.5	-40
2N384	Ge Drift Field	TO-44	50	21	100	60	-1	-40
2N1225	Ge Drift Field	TO-33	50	21	100	60	-1.5	-40
2N1396	Ge Drift Field	TO-33	50	21	100	90	-1.5	-40
2N370	Ge Drift Field	TO-7	20	17	60	100	-1	-24
2N274	Ge Drift Field	TO-44	12.5	27	30	60	-1.5	-40
2N1224	Ge Drift Field	TO-33	12.5	27	30	60	-1.5	-40
2N1226	Ge Drift Field	TO-33	12.5	27	30	60	-1.5	-60
2N1395	Ge Drift Field	TO-33	12.5	27	30	90	-1.5	-40
2N1180	Ge Drift Field	TO-45	10.7	35	100	80	-1.5	-30
2N1631	Ge Drift Field	TO-40	1.5	47.7	45	80	-1	-34
2N1632	Ge Drift Field	TO-1	1.5	47.7	45	80	-1	-34
2N1637	Ge Drift Field	TO-1	1.5	47.7	45	80	-1	-34
2N139	Ge Alloy	TO-40	0.455	37	4.7	48	-1	-16
2N218	Ge Alloy	TO-1	0.455	37	4.7	48	-1	-16

RCA Type	Material and Const.	JEDEC Pkg.	TYPICAL OPERATING FREQUENCY and Max. P_g		Typ. f_{hfb}	Typ. h_{fe} @ I_C		Max. V_{CB}
			Mc	db	Mc	h_{fe}	ma	volts
TYPES FOR IF AND RF AMPLIFIER SERVICE								Frequency of Application: 0.262 to 200 Mc
2N409	Ge Alloy	TO-40	0.455	37.8	6.7	48	-1	-13
2N410	Ge Alloy	TO-1	0.455	37.8	6.7	48	-1	-13
2N1425	See 2N1524	TO-7	0.455	51	33	50	-1	-24
2N1524	Ge Drift Field	TO-1	0.455	54.4	33	60	-1	-24
2N1525	Ge Drift Field	TO-40	0.455	54.4	33	60	-1	-24
2N1638	Ge Drift Field	TO-1	0.262	61.5	40	75	-1	-34
TYPES FOR CONVERTER, OSCILLATOR, AND MIXER SERVICE								Frequency of Application: 1 to 120 Mc
2N1178	Ge Drift Field	TO-45	120	Local Oscillator Service	140	40	-1	-30
2N1179	Ge Drift Field	TO-45	100	17	140	80	-1	-30
2N371	Ge Drift Field	TO-7	23	Local Oscillator Service	30	80	-1	-24
2N372	Ge Drift Field	TO-7	10	26.2	30	80	-1	-24
2N1426	See 2N1526	TO-7	1.5	43.5	33	130	-1	-24
2N1526	Ge Drift Field	TO-1	1.5	48.9	33	130	-1	-24
2N1527	Ge Drift Field	TO-40	1.5	48.9	33	130	-1	-24
2N1639	Ge Drift Field	TO-1	1.5	37	45	75	-1	-34
2N140	Ge Alloy	TO-40	1	32	10	75	-0.6	-16
2N219	Ge Alloy	TO-1	1	32	10	75	-0.6	-16
2N411	Ge Alloy	TO-40	1	32	10	75	-0.6	-13
2N412	Ge Alloy	TO-1	1	32	10	75	-0.6	-13

RCA Type p-n-p	Material and Const.	JEDEC Pkg.	MAXIMUM RATINGS			CHARACTERISTICS			
			P_T @25°C	V_{CB}	I_C	Typ. h_{FE} @ I_C (ma)		Typ. f_{hfb}	Typ. f_T
			Watts	Volts	Amp	h_{FE}	ma	Mc	Mc
TYPES FOR LARGE-SIGNAL AMPLIFIER APPLICATIONS - Classes A & B			P_T: 0.1 to 50 watts						
2N647†	Ge Alloy	TO-1	0.1	25	0.05	70	50	-	-
2N649†	Ge Alloy	TO-1	0.1	20	0.05	65	50	-	-
2N109	Ge Alloy	TO-40	0.15	-25	-0.07	75	-50	1	-
2N217	Ge Alloy	TO-1	0.15	-25	-0.07	75	-50	1	-
2N407	Ge Alloy	TO-40	0.15	-20	-0.07	65	-50	-	-
2N408	Ge Alloy	TO-1	0.15	-20	-0.07	65	-50	-	-
2N270	Ge Alloy	~TO-7	0.25	-25	-0.075	70	-150	1	-
2N176	Ge Alloy	TO-3	10	-40	-3	63	-500	-	-
2N351	Ge Alloy	TO-3	10	-40	-3	65	-700	-	-
2N376	Ge Alloy	TO-3	10	-40	-3	78	-700	-	-
2N301			See 2N2869/2N301						
2N301A			See 2N2870/2N301A						
2N2147	Ge Drift-Field	TO-3	12.5+	-75	-5	150	-1000	-	4
2N2148	Ge Drift-Field	TO-3	12.5+	-60	-5	80	-1000	-	3
2N1905	Ge Drift-Field	TO-3	50+	-60	-10	90	-1000	-	7.5
2N1906	Ge Drift-Field	TO-3	50+	-100	-10	125	-5000	-	7.5

RCA Type p-n-p	Material and Const.	JEDEC Pkg.	MAXIMUM RATINGS			CHARACTERISTICS			
			P_T at 25° C	V_{CB}	I_C	Typ. h_{fe} @ I_C (ma)		Typ. f_{hfb}	Max. I_{CBO}
			mw	Volts	ma	h_{fe}	ma	Mc	μa
TYPES FOR SMALL-SIGNAL AMPLIFIER APPLICATIONS			P_T: 20 to 150 mil watts						
2N175	Ge Alloy	TO-40	20	-10	-2	65	-0.5	0.85	-12
2N220▲	Ge Alloy	TO-1	20	-10	-2	65	-0.5	0.85	-12
2N1010†	Ge Alloy	TO-1	20	10	2	35	0.3	2	10
2N591	Ge Alloy	TO-1	50	-32	-20	70	-2	0.7	-7
2N2613††	Ge Alloy	TO-1	100	-30	-50	200	-0.5	10	-5
2N2614	Ge Alloy	TO-1	100	-40	-50	160	-1	10	-5
2N104	Ge Alloy	TO-40	150	-30	-50	44	-1	0.7	-10
2N215	Ge Alloy	TO-1	150	-30	-50	44	-1	0.7	-10
2N405	Ge Alloy	TO-40	150	-20	-35	35	-1	0.65	-14
2N406	Ge Alloy	TO-1	150	-20	-35	35	-1	0.65	-14

▲ military version also available # conversion power gain

†† low-noise type: NF = 5 db max. † n-p-n type

+ with heat sink * Gain-bandwidth product

↓ minimum DDEP = Double-diffused epitaxial planar

RCA COMPUTER SWITCHING TRANSISTORS

Type p-n-p	Material and Construction	JEDEC Pkg.	CHARACTERISTICS: Min. f_T or f_{hfe} (Mc)	Min. h_{FE} @ I_C: h_{FE}	ma	Max. C_{ob} (pf)	MAXIMUM RATINGS: P_T (mw)	V_{CE} (volts)
TYPES FOR HIGH VOLTAGE SWITCHING APPLICATIONS								V_{CE}: to 105 volts
2N398▲	Ge Alloy	TO-5	-	20	-5	-	50	-105●
2N398A	Ge Alloy	TO-5	-	20	-5	-	150	-105●
2N398B	Ge Alloy	TO-5	-	20	-5	-	250	-105●
2N586	Ge Alloy	TO-7	-	30	-250	-	250	-45●
TYPES FOR MEDIUM-SPEED SWITCHING APPLICATIONS								f_{hfe}: 3 to 15 Mc
2N578	Ge Alloy	TO-9	3■	10	-400	-	120	-14+
2N585†	Ge Alloy	TO-9	3■	20	20	25§	120	15
2N1319	Ge Alloy Bidirectional	TO-5	3■	15	-400	19§	120	-21●
2N395 †▲	Ge Alloy	TO-5	3■	20	-10	20	150	-15⊕
2N1302†▲	Ge Alloy	TO-5	3■	20	10	20	150	25●
2N1303†▲	Ge Alloy	TO-5	3■	20	-10	20◇	150	-30●
2N583	Ge Alloy	TO-1	4■	20	-20	20◇	120	-15+
2N404▲	Ge Alloy	TO-5	4■	24	-24	20◇	150	-24+
2N404A	Ge Alloy	TO-5	4■	24	-24	20◇	150	-35+
2N581	Ge Alloy	TO-5	4■	20	-20	20◇	150	-15+
2N1605†	Ge Alloy	TO-5	4■	24	24	20	150	24+
2N1605A†	Ge Alloy	TO-5	4■	24	24	20§	200	40+
2N1169†	Ge Alloy Bidirectional	TO-5	4.5■	20	200	19§	120	18
2N1170†	Ge Alloy Bidirectional	TO-5	4.5■	20	200	19§	120	20
2N579	Ge Alloy	TO-9	5■	20	-400	-	120	-14+
2N1090†	Ge Alloy	TO-9	5■	30	20	25	120	15
2N388†▲	Ge Alloy	TO-5	5■	30	200	-	150	20⊕
2N388A†	Ge Alloy	TO-5	5■	30	200	-	150	20⊕
2N396	Ge Alloy	TO-5	5■	30	-10	20	150	-20⊕
2N1304†▲	Ge Alloy	TO-5	5■	40	10	20	150	25●
2N1305▲	Ge Alloy	TO-5	5■	40	-10	20	150	-30●
2N396A	Ge Alloy	TO-5	5■	30	-10	20§	200	-20
2N414	Ge Alloy	TO-5	8■§	80*	★★	11§	150	-15
2N580	Ge Alloy	TO-9	10■	30	-400	-	120	-14+
2N1091†	Ge Alloy	TO-9	10■	40	20	25	120	12
2N397	Ge Alloy	TO-5	10■	40	-10	20	150	-15⊕
2N1306†▲	Ge Alloy	TO-5	10■	60	10	20	150	25●
2N1307▲	Ge Alloy	TO-5	10■	60	-10	20	150	-30●
2N269	Ge Alloy	TO-1	13■§	24	-24	20◇	120	-24+
2N582	Ge Alloy	TO-5	14■	40	-24	20◇	150	-14+
2N584	Ge Alloy	TO-1	14■	40	-24	12◇	120	-14+
2N1308†▲	Ge Alloy	TO-5	15■	80	10	20	150	25●
2N1309†▲	Ge Alloy	TO-5	15■	80	10	20	150	-30●
3907/2N404 Premium version of 2N404								

THYRISTOR (BISTABLE) TYPES

Type	Material and Construction	JEDEC Pkg.	MAXIMUM RATINGS: V_{CB} (volts)	I_C (ma)	$I_{C(sus)}$ (ma)	P_d (mw)	CHARACTERISTICS: Max. I_b for "Turn-On" Forward (ma)	"Turn-off" Reverse Ma at indicated I_C (ma)	
2N1213	Germanium Diffused-Junction Mesa	TO-5	-25	-100	-8	75	-0.5	3	-10
2N1214		TO-5	-25	-100	-18	75	-1.0	7	-20
2N1215		TO-5	-25	-100	-26	75	-1.5	10	-30
2N1216		TO-5	-25	-100	-45	75	-5.0	-	-

■alpha-cutoff frequency ◇collector capacitance +BV_{CEX}, V_{BE} = -1 v ▲military version available

σtypical collector transition capacitance §typical **I_E = 1 ma †n-p-n type

♡pulsed ○V_{CES} ⊕V_{CER} ●BV_{CBO}

Type p-n-p	Material and Construction	JEDEC Pkg.	CHARACTERISTICS: Min. f_T or f_{hfe} (Mc)	Min. h_{FE} @ I_C: h_{FE}	ma	Max. C_{ob} (pf)	MAXIMUM RATINGS: P_T (mw)	V_{CE} (volts)
TYPES FOR HIGH SPEED SWITCHING APPLICATIONS								f_T: 20 to 1000 Mc
2N1450	Ge Drift-Field	TO-9	-	20	-10	-	120	-20
2N643	Ge Drift-Field	TO-9	20	20	-5	5	120	-29+
2N1384	Ge Drift-Field	TO-11	20	20	-200	-	240	-30
2N794	Ge Mesa	TO-18	25	30	-10	12◇	150	-13●
2N1300	Ge Mesa	TO-5	25	30	-10	12◇	150	-12
2N795	Ge Mesa	TO-18	35	30	-10	12◇	150	-12
2N934	Ge Mesa	TO-18	35	40	-40	12	150	-13
2N1301	Ge Mesa	TO-5	35	30	-10	12◇	150	-12
2N644	Ge Drift-Field	TO-9	40	20	-5	5	120	-29+
2N1853▲	Ge Mesa	TO-5	-	30	-6	-	150	-6
2N1854▲	Ge Mesa	TO-5	40	40	-20	12	150	-6
2N796	Ge Mesa	TO-18	50	50	-10	12◇	150	-12
2N1683	Ge Mesa	TO-5	50	50	-10	12◇	150	-12
2N645	Ge Drift-Field	TO-9	60	20	-5	5	120	-29+
2N1613†*	Si Triple-Diffused Planar	TO-5	60	20	0.1	25	800	50⊕
2N2102†*	Si Triple-Diffused Planar	TO-5	60	10	0.1	15	1000	80⊕
2N2270†*	Si Triple-Diffused Planar	TO-5	60	150	150♡	15	1000	60●
2N1711†*	Si Triple-Diffused Planar	TO-5	70	100♡	150	25	800	50⊕
2N696†▲	Si Diffused Junction	TO-5	80§	20	150	35	600	40⊕
2N697†▲	Si Diffused Junction	TO-5	100§	40	150	35	600	40⊕
2N711	Ge Mesa	TO-18	200§	20	-10	5σ	150	-12
2N706†▲	Si Mesa	TO-18	200	20	10	6	300	20⊕
2N706A†▲	Si Mesa	TO-18	200	20	10	-	300	20⊕
2N1708†	Si Planar-Epitaxial	TO-46	200	20	10	6	300	25●
2N2205†	Si Planar-Epitaxial	TO-18	200	20	10	6	300	25●
2N2206†	Si Planar-Epitaxial	TO-46	200	40	10	6	300	25●
2N2476†	Si Planar-Epitaxial	TO-5	250	20	150	10	600	20
2N2477†	Si Planar-Epitaxial	TO-5	250	40	150	10	600	20
2N705	Ge Mesa	TO-5	300§	25	-10	5σ	150	-15
2N710	Ge Mesa	TO-18	300§	25	-10	5σ	150	-15
2N828	Ge Mesa	TO-18	300	25	-10	6	150	-15○
2N914†	Si Planar-Epitaxial	TO-18	300	30	10	6	360	15
2N834†	Si Planar-Epitaxial	TO-18	350	25	10	4	300	30○
2N709†	Si Planar-Epitaxial	TO-18	600	15	30	3	300	6
2N2475†	Si Planar-Epitaxial	TO-18	600	20	50	3	300	6
2N955†	Ge Mesa	TO-18	1000§	30	30	6	150	8
2N955A†	Ge Epitaxial	TO-18	1000§	30	30	6	150	8
2N708†	Si Planar	TO-18	-	30	10	6	360	20⊕

DIGITAL MICROCIRCUITS

Type	CHARACTERISTICS: Max. Number: Inputs	Outputs	Typ. t_r (nsec)	Typ. t_f (nsec)	Typ. Stage Delay (nsec)	Noise Immunity: Off Volts	On Volts
DMC-100	15	5	11	10	7	1.5	1.5
DMC-101	6	2	2	-	-	-	-

RCA TUNNEL DIODES

RCA Type	Material and Construction		CHARACTERISTICS: Max. I_p ± Tolerance (Amp)	(%)	Min. I_p/I_v	Max. C (pf)
FOR SWITCHING AND MICROWAVE APPLICATIONS				I_p: 0.001 to 200 Amperes		
40079	GaAs	Diffused-Junction	200	10	10:1	1.25 μf
40070	Ge	Epitaxial	100	10	8:1	0.5 μf
40069	Ge	Epitaxial	20	10	8:1	0.09 μf
40068	Ge	Epitaxial	10	10	8:1	.045 μf
40067	Ge	Epitaxial	5	10	8:1	.016 μf
40066	Ge	Epitaxial	1	10	8:1	.002 μf
40076	GaAs	Diffused-Junction	0.2	10	15:1	25
1N3851	Ge	Epitaxial	0.1	10	6:1	40
1N3856	Ge	Epitaxial	0.1	5	8:1	25
40059	GaAs	Diffused-Junction	0.05	10	10:1	40
1N3850	Ge	Epitaxial	0.05	10	6:1	40
1N3138	GaAs	Diffused-Junction	0.05	5	13:1	30
1N3130	Ge	-	0.05	5	8:1	25
1N3855	Ge	Epitaxial	0.05	5	8:1	25
40058	GaAs	Diffused-Junction	0.05	5	12:1	20
1N3860	Ge	Epitaxial	0.05	5	8:1	12
40061	GaAs	Diffused-Junction	0.02	10	9:1	30
1N3849	Ge	Epitaxial	0.02	10	6:1	30
1N3854	Ge	Epitaxial	0.02	5	8:1	20
1N3129	Ge	-	0.02	5	8:1	20
40060	GaAs	Diffused-Junction	0.02	5	11:1	15
1N3859	Ge	Epitaxial	0.02	5	8:1	10
40063	GaAs	Diffused-Junction	0.01	10	8:1	25
1N3848	Ge	Epitaxial	0.01	10	6:1	25
1N3853	Ge	Epitaxial	0.01	5	8:1	15
40062	GaAs	Diffused-Junction	0.01	5	10:1	10
1N3858	Ge	Epitaxial	0.01	5	8:1	8
40065	GaAs	Diffused-Junction	0.005	10	7:1	20
1N3847	Ge	Epitaxial	0.005	10	6:1	25
1N3852	Ge	Epitaxial	0.005	5	8:1	15
1N3128	Ge	-	0.005	5	8:1	15
1N3857	Ge	Epitaxial	0.005	5	8:1	8
40064	GaAs	Diffused-Junction	0.005	5	8:1	8
40078	Ge	-	0.001	10	5:1	10
40077	Ge	-	0.001	10	6:1	5

RCA TUNNEL RECTIFIERS

RCA Type	Material	CHARACTERISTICS: Min. I_p (ma)	Max. V_R mv (I_R=30ma)	(I_R=10ma)	Min. V_F @ I_F = 1 ma (volts)	Max. C (pf)
FOR COUPLING APPLICATIONS				I_p: 0.5 & 1.0 Milliampere		
40055	GaAs	0.5	200 (I_R = 5ma)	350	950	6
40057	GaAs	0.5	250 (I_R = 5ma)	275	950	6
40054	GaAs	1.0	160 (I_R = 5ma)	300	950	6
40056	GaAs	1.0	180 (I_R = 5ma)	225	950	6
1N3861	Ge	1.0	-	170	400	6
1N3862	Ge	1.0	300	150	420	4
1N3863	Ge	1.0	300	150	435	4

RCA FERRITE MEMORY CORES

RCA Type	Size OD/ID (mil)	I_m (ma)	Max. t_s (μ sec)	Max. dV_z (mv)	Min. uV_1 (mv)
FOR COINCIDENT-CURRENT, WORD-ADDRESS APPLICATIONS					
225M1	50/30	230	2.50	6	20
250M1	50/30	350	1.25	12	50
249M1	50/30	350	1.40	8	54
242M1	50/30	350	1.40	10	45
246M1●	50/30	360	1.30	5	48
248M1	50/30	360	1.35	6	55
222M2	80/50	360	3.00	14	45
253M1	50/30	370	1.25	10	40
226M1	50/30	380	1.40	8	60
241M1	80/50	380	2.35	10	50
236M1	80/50	380	2.35	12	60
230M1	50/30	400	1.30	11	50
239M1	50/30	445	1.15	10	45
254M1	30/18	440	0.43	11	45
245M1	50/30	450	1.05	12	54
244M1	50/30	450	1.25	12	40
224M1	50/30	460	1.25	12	50
232M1	50/30	460	1.25	12	50
227M1	50/30	470	0.80	22	70
234M1	50/30	485	1.15	12	55
237M1	50/30	500	0.90	11	75
238M1	50/30	512	0.75	20	115
263M1●	30/18	550	1.25	4	20
228M1	80/50	560	1.25	30	100
240M1	80/50	567	1.30	28	100
243M1	50/30	725	0.75	20	95
223M1	80/50	740	1.25	30	100
231M1	80/50	740	1.25	30	100
229M1	50/30	800	0.55	20	145
233M1	50/30	800	1.25	8	55
FOR IMPULSE-SWITCHING APPLICATIONS					
400M1	30/18	380	0.2	8	50*
401M1	50/30	570	0.2	18	120*

TRANSFLUXOR (Two-Aperture) TYPES

RCA Type	Size OD/ID (mil)	I_m (ma)	Max. t_s (μsec)	Max. dV_z (mv)	Min. uV_1 (mv)
FOR MAGNETIC-MEMORY and MAGNETIC CHANNEL-SELECTION APPLICATIONS					
500M1	OD 206	580▲ 300	2.1	22	55
501M1	OD 126	360▲ 160	2.5	10	30

RCA FERRITE-CORE MEMORY PLANES

N7165-1 Utilizes 1024 RCA-230M1's in a 32 x 32 arrangement. Length, 3.1"; Width, 3.1"; Height, 0.25"

N7097-1 Utilizes 4096 RCA-230M1's in a 64 x 64 arrangement. Length, 5.1"; Width, 5.1"; Height, 0.25"

N7166-1 Wide-temperature-range (-55°C to +85°C) type. Utilizes 1024 RCA-233M1's in a 32 x 32 arrangement. Length, 3.1"; Width, 3.1"; Height, 0.25"

N7190-1 Wide-temperature-range (-55°C to +85°C) type. Utilizes 4096 RCA-233M1's in a 64 x 64 arrangement. Length, 5.1"; Width, 5.1"; Height, 0.25"

CUSTOM PLANES AVAILABLE IN A WIDE RANGE OF MATERIALS —OPERATING CYCLE TIMES TO 375 NANOSECONDS

RCA MEMORY SYSTEMS— a complete design, production, and test facility for memory systems with operating cycle times to 375 nanoseconds.

●temperature-stable (wide-temperature-range) type

▲I_s = setting current
I_m = full drive current
t_s = switching time

*uV_{R1} = "Undisturbed Read-1" response voltage
uV_1 = "Disturbed-1" response voltage
dV_z = "Disturbed-0" response voltage

RCA SILICON DIFFUSED-JUNCTION RECTIFIERS

RCA Type	JEDEC Pkg.	MAXIMUM RATINGS PRV (Volts)	$I_{F(av)}$* @ T_{FA} = °C (Amp)	T	I_F peak rep. (Amp)	I_F peak surge (Amp)	CHARACTERISTICS Max. E_{FWD} (Volts)	Max. I_R** (ma)
TUBULAR SINGLE-ENDED TYPES FOR CONSUMER-PRODUCT APPLICATIONS		**PRV: 100 to 400 Volts**						
1N3754	~TO-1	100	0.125	65	1.3	30	1	0.3
1N3755	~TO-1	200	0.125	65	1.3	30	1	0.3
1N3756	~TO-1	400	0.125	65	1.3	30	1	0.3
AXIAL-LEAD TYPES FOR INDUSTRIAL AND CONSUMER-PRODUCT APPLICATIONS		**PRV: 50 to 1000 Volts**						
1N2858	DO-1	50	0.75 0.5□	75	-	40	1.2	0.4
1N2859	DO-1	100	0.75 0.5□	75	-	40	1.2	0.4
1N3193	~TO-1	200	0.75 0.5□	75	6	35	1.2	0.2
1N3253		Insulated version of 1N3193						
1N2860	DO-1	200	0.75 0.5□	75	-	40	1.2	0.4
1N2861	DO-1	300	0.75 0.5□	75	-	40	1.2	0.3
1N3194	~TO-1	400	0.75 0.5□	75	6	35	1.2	0.2
1N3254		Insulated version of 1N3194						
1N2862	DO-1	400	0.75 0.5□	75	-	40	1.2	0.3
1N2863	DO-1	500	0.75 0.5□	75	-	40	1.2	0.3
1N2864	DO-1	600	0.75	75	-	40	1.2	0.3
1N3195	~TO-1	600	0.75 0.5□	75	6	35	1.2	0.2
1N3255		Insulated version of 1N3195						
1N3196	~TO-1	800	0.75 0.4□	75	5	35	1.2	0.2
1N3256		Insulated version of 1N3196						
1N3563	~TO-1	1000	0.4 0.3□	75	4	35	1.2	0.2
HIGH-VOLTAGE TYPES		**PRV: 1200 to 12000 Volts**						
CR101	↑	1200	0.85	60	5	15	1.2	0.3
CR201		1500	0.3	60	3	9	1.8	0.1
CR102		2000	0.825	60	5	15	2.4	0.3
CR103		3000	0.725	60	5	15	3	0.3
CR203		3000	0.3	60	3	9	3	0.1
CR104		4000	0.625	60	5	15	4.2	0.3
CR204		4500	0.3	60	3	9	3.6	0.1
CR105	Special RCA Pkg.	5000	0.625	60	5	15	4.8	0.3
CR106		6000	0.575	60	5	15	6	0.3
CR206		6000	0.3	60	3	9	6	0.1
CR107		7000	0.55	60	5	15	7.2	0.3
CR108		8000	0.55	60	5	15	7.8	0.3
CR208		8000	0.3	60	3	9	6	0.1
CR109		9000	0.55	60	5	15	9	0.3
CR110		10000	0.55	60	5	15	9.6	0.3
CR210		10000	0.3	60	3	9	7.2	0.1
CR212	↓	12000	0.3	60	3	9	9	0.1

RCA Type	JEDEC Pkg.	MAXIMUM RATINGS $I_{F(av)}$* @ T_C = °C (Amp)	T_C	PRV (Volts)	I_F peak rep. (Amp)	I_F peak surge (Amp)	CHARACTERISTICS Max. E_{FWD} (Volts)	Max. I_R** (ma)
AXIAL-LEAD TYPES FOR TV AND RADIO RECEIVER APPLICATIONS					**I_F: 0.5 Ampere**			
1N1763	DO-1	0.5□	75	400	5	35	3	0.1‡
1N1764	DO-1	0.5□	75	500	5	35	3	0.1‡
AXIAL-LEAD TYPES FOR MILITARY AND INDUSTRIAL APPLICATIONS					**I_F: 0.65 to 0.75 Ampere**			
1N4448	DO-1	0.65	50♣	500	3.5	15	1.5	1.75 μa‡
1N4458	DO-1	0.65	50♣	600	3.5	15	1.5	2 μa‡
1N536	DO-1	0.75	50♣	50	-	15	1.1	5 μa‡
1N4408	DO-1	0.75	50♣	100	3.5	15	1.5	0.3 μa‡
1N537	DO-1	0.75	50♣	100	-	15	1.1	5 μa‡
1N4418	DO-1	0.75	50♣	200	3.5	15	1.5	0.75 μa‡
1N538▲	DO-1	0.75	50♣	200	-	15	1.1	5 μa‡
1N4428	DO-1	0.75	50♣	300	3.5	15	1.5	1 μa‡
1N539	DO-1	0.75	50♣	300	-	15	1.1	5 μa‡
1N4438	DO-1	0.75	50♣	400	3.5	15	1.5	1.5 μa‡
1N540▲	DO-1	0.75	50♣	400	-	15	1.1	5 μa‡
1N1095	DO-1	0.75	50♣	500	-	15	1.2	5 μa‡
1N547▲	DO-1	0.75	50♣	600	-	15	1.2	5 μa‡
STUD-MOUNTED TYPES FOR MILITARY AND INDUSTRIAL APPLICATIONS					**I_F: 5 to 40 Amperes**			
1N1612, 1N1612R	DO-4	5	135	50	15	-	1.5	1
1N1613, 1N1613R	DO-4	5	135	100	15	-	1.5	1
1N1614, 1N1614R	DO-4	5	135	200	15	-	1.5	1
1N1615, 1N1615R	DO-4	5	135	400	15	-	1.5	1
1N1616, 1N1616R	DO-4	5	135	600	15	-	1.5	1
40108	DO-4	10	150	10	40	140	.60	2
40109	DO-4	10	150	100	40	140	.60	2
40110	DO-4	10	150	200	40	140	.60	1.5
40111	DO-4	10	150	300	40	140	.60	1.5
40112	DO-4	10	150	400	40	140	.60	1
40114	DO-4	10	150	600	40	140	.60	0.75
40115	DO-4	10	150	800	40	140	0.6	0.65
40116	DO-4	10	150	1000	40	140	0.6	0.5
1N1199A	DO-4	12	150	50	50	240	0.55	3
1N1199RA	DO-4	12	150	50	50	240	0.55	3
1N1200A	DO-4	12	150	100	50	240	0.55	2.5
1N1200RA	DO-4	12	150	100	50	240	0.55	2.5
1N1202A	DO-4	12	150	200	50	240	0.55	2
1N1202RA	DO-4	12	150	200	50	240	0.55	2
1N1203A	DO-4	12	150	300	50	240	0.55	1.75
1N1203RA	DO-4	12	150	300	50	240	0.55	1.75
1N1204A	DO-4	12	150	400	50	240	0.55	1.5
1N1204RA	DO-4	12	150	400	50	240	0.55	1.5
1N1205A	DO-4	12	150	500	50	240	0.55	1.25
1N1205RA	DO-4	12	150	500	50	240	0.55	1.25
1N1206A	DO-4	12	150	600	50	240	0.55	1
1N1206RA	DO-4	12	150	600	50	240	0.55	1
40208	DO-5	18	150	50	72	250	0.65	3
40209	DO-5	18	150	100	72	250	0.65	3

RCA GERMANIUM COMPENSATING DIODE	1N2326	V_R(max) = -1 volt	I_F(max) = 10 ma	E_{FWD} @ 25°C = 135 mv

▲ military version also available ♣ free-air temperature □ with capacitive load ‡ static characteristic ** dynamic * with resistive load except as noted

RCA SILICON DIFFUSED-JUNCTION RECTIFIERS

RCA Type	JEDEC Pkg.	MAXIMUM RATINGS					CHARACTERISTICS	
		$I_{F(av)}$* @T_C = °C		PRV	I_F peak rep.	I_F peak surge	Max. E_{FWD}	Max. I_R**
		Amp	T_C	Volts	Amp	Amp	Volts	ma
STUD-MOUNTED TYPES FOR MILITARY AND INDUSTRIAL APPLICATIONS						I_F: 5 to 40 Amperes		
40210	DO-5	18	150	200	72	250	0.65	2.5
40211	DO-5	18	150	300	72	250	0.65	2.5
1N1195	DO-5	18	150	300	-	220	2.35	5
1N1195R	DO-5	18	150	300	-	220	2.35	5
40212	DO-5	18	150	400	72	250	0.65	2.0
1N1196	DO-5	18	150	400	-	220	2.35	5
1N1196R	DO-5	18	150	400	-	220	2.35	5
1N1197	DO-5	18	150	500	-	220	2.35	5
1N1197R	DO-5	18	150	500	-	220	2.35	5
40214	DO-5	18	150	600	72	250	0.65	1.5
1N1198	DO-5	18	150	600	-	220	2.35	5
1N1198R	DO-5	18	150	600	-	220	2.35	5
1N248A	DO-5	20	150	50	90	250	1.5	5
1N248RA	DO-5	20	150	50	90	250	1.5	5
1N248B	DO-5	20	150	55	90	250	1.5	5
1N248RB	DO-5	20	150	55	90	250	1.5	5
1N248C	DO-5	20	150	55	90	350	0.6	3.8
1N248RC	DO-5	20	150	55	90	350	0.6	3.8
1N249A	DO-5	20	150	100	90	250	1.5	5
1N249RA	DO-5	20	150	100	90	250	1.5	5
1N249B	DO-5	20	150	110	90	250	1.5	5
1N249RB	DO-5	20	150	110	90	250	1.5	5
1N249C	DO-5	20	150	110	90	350	0.6	3.6
1N249RC	DO-5	20	150	110	90	350	0.6	3.6
1N250A	DO-5	20	150	200	90	250	1.5	5

RCA Type	JEDEC Pkg.	MAXIMUM RATINGS					CHARACTERISTICS	
		$I_{F(av)}$* @T_C = °C		PRV	I_F peak rep.	I_F peak surge	Max. E_{FWD}	Max. I_R**
		Amp	T_C	Volts	Amp	Amp	Volts	ma
1N250RA	DO-5	20	150	200	90	250	1.5	5
1N250B▲	DO-5	20	150	220	90	350	1.5	5
1N250RB	DO-5	20	150	220	90	350	1.5	5
1N250C	DO-5	20	150	220	90	350	0.6	3.4
1N250RC	DO-5	20	150	220	90	350	0.6	3.4
1N1195A	DO-5	20	150	300	90	350	0.6	3.2
1N1195RA	DO-5	20	150	300	90	350	0.6	3.2
1N1196A	DO-5	20	150	400	90	350	0.6	2.5
1N1196RA	DO-5	20	150	400	90	350	0.6	2.5
1N1197A	DO-5	20	150	300	90	350	0.6	2.2
1N1197RA	DO-5	20	150	400	90	350	0.6	2.2
1N1198A	DO-5	20	150	500	90	350	0.6	1.5
1N1198RA	DO-5	20	150	600	90	350	0.6	1.5
1N1187	DO-5	35	140	300	130	500	1.7	10
1N1187R	DO-5	35	140	300	130	500	1.7	10
1N1188	DO-5	35	140	400	130	500	1.7	10
1N1188R	DO-5	35	140	400	130	500	1.7	10
1N1189	DO-5	35	140	500	130	500	1.7	10
1N1189R	DO-5	35	140	500	130	500	1.7	10
1N1190	DO-5	35	140	600	130	500	1.7	10
1N1190R	DO-5	35	140	600	130	500	1.7	10
1N1183A	DO-5	40	150	50	195	800	0.65	2.5
1N1183RA	DO-5	40	150	50	195	800	0.65	2.5
1N1184A	DO-5	40	150	100	195	800	0.65	2.5
1N1184RA	DO-5	40	150	100	195	800	0.65	2.5
1N1186A	DO-5	40	150	200	195	800	0.65	2.5
1N1186RA	DO-5	40	150	200	195	800	0.65	2.5

RCA SILICON CONTROLLED RECTIFIERS

RCA Type (TO-48 CASE)	MAXIMUM RATINGS						CHARACTERISTICS	
	I_F (rms) @ stated temperature		V_{RM} (non-rep)	V_{RM} (rep) and V_{FBOM} (rep)	I_{FM} (peak surge)	T_C	Max. V_{GT} @ I_{GT} T_C = 125°C	
	amp	°C	volts	volts	amp	°C	volts	ma
2N681	25	65	35	25	150	125	3	25
2N682	25	65	75	50	150	125	3	25
2N683	25	65	150	100	150	125	3	25
2N684	25	65	225	150	150	125	3	25
2N685	25	65	300	200	150	125	3	25
2N686	25	65	350	250	150	125	3	25
2N687	25	65	400	300	150	125	3	25
2N688	25	65	500	400	150	125	3	25
2N689	25	65	600	500	150	125	3	25

RCA Type (TO-48 CASE)	MAXIMUM RATINGS						CHARACTERISTICS	
	I_F (rms) @ stated temperature		V_{RM} (non-rep)	V_{RM} (rep) and V_{FBOM} (rep)	I_{FM} (peak surge)	T_C	Max. V_{GT} @ I_{GT} T_C = 125°C	
	amp	°C	volts	volts	amp	°C	volts	ma
2N1842A	16	80	35	25	125	125	3.5	45
2N1843A	16	80	75	50	125	125	3.5	45
2N1844A	16	80	150	100	125	125	3.5	45
2N1845A	16	80	225	150	125	125	3.5	45
2N1846A	16	80	300	200	125	125	3.5	45
2N1847A	16	80	350	250	125	125	3.5	45
2N1848A	16	80	400	300	125	125	3.5	45
2N1849A	16	80	500	400	125	125	3.5	45
2N1850A	16	80	600	500	125	125	3.5	45

RCA MILITARY-SPECIFICATION TRANSISTORS AND RECTIFIERS

USA 1N249B	USAF 1N1200	USAF 1N1206	USN 2N388	USA 2N1184	USN 2N1303	USN 2N1309	USA 2N1483	USA 2N1489	USN 2N1853
USA 1N250B	USAF 1N1201	USA 1N2135A	USN 2N398	USA 2N1184A	USN 2N1304	USN 2N1412	USA 2N1484	USA 2N1490	USN 2N1854
JAN 1N538	USAF 1N1202	JAN 2N174	USAF 2N404	USA 2N1184B	USN 2N1305	USN 2N1479	USA 2N1485	USA 2N1511	USA 2N2273M
JAN 1N540	USAF 1N1203	JAN 2N220	USA 2N1183	USA 2N1224	USN 2N1306	USN 2N1480	USA 2N1486	USA 2N1512	
JAN 1N547	USAF 1N1204	USA 2N274	USA 2N1183A	USA 2N1225	USN 2N1307	USN 2N1481	USA 2N1487	USA 2N1513	
USAF 1N1199	USAF 1N1205	JAN 2N384	USA 2N1183B	USN 2N1302	USN 2N1308	USN 2N1482	USA 2N1488	USA 2N1514	

RCA PHOTOCONDUCTIVE, PHOTOJUNCTION, AND PHOTOVOLTAIC CELLS

Cadmium-Sulfide Types

RCA Type[a]	MAXIMUM RATINGS: Voltage Between Terminals DC or Peak AC Volts	MAXIMUM RATINGS: Power Dissipation Watt	CHARACTERISTICS @ 25° C: Voltage Between Terminals Volts	CHARACTERISTICS @ 25° C: PHOTOCURRENT ma Min.	CHARACTERISTICS @ 25° C: PHOTOCURRENT ma Max.
4402	200	0.05	12 (dc)	1.6	-
4403	250	0.3	50 (ac)	7	16
4404	600	0.3	50 (ac)	2.5	5
4413	110	0.05	12 (dc)	1	2.75
4423	250	0.2	50 (ac)	1.5	4
4424	110	0.2	12 (dc)	3.6	14.5
4425	110	0.2	12 (dc)	3.6	14.5
4448	600	0.3	50 (ac)	1.5	4
4453	600	0.3	50 (ac)	3	7
6694A[b]	150	0.03	90 (dc)	0.057	0.65
7163	600	0.3	50 (ac)	1	3
7412	200	0.05	12 (dc)	0.065	0.275
7536	200	0.05	12 (dc)	0.065	0.275
SQ2500	250	0.2	12 (dc)	0.24	0.8
SQ2502[c]	600	0.5	50 (dc)	2.5	5
SQ2504	600	0.3	50 (ac)	1.5	4
SQ2505	250	0.3	50 (ac)	7	16
SQ2506	600	0.3	50 (ac)	1	3
SQ2508	200	0.05	12 (dc)	0.065	0.275

Silicon N on P Photovoltaic Types

RCA Type[f]	CHARACTERISTICS @ 27° ± 1° C: Minimum Current ma	Minimum Power Output mw	Minimum Efficiency per cent
SL2205	48	17.9	10.0
SL2206	101.5	37.8	10.0

Germanium P-N Alloy Types

RCA Type[d]	MAXIMUM RATINGS: Voltage Between Terminals dc volts	MAXIMUM RATINGS: Power Dissipation watt	CHARACTERISTICS @ 25° C: Voltage Between Terminals dc volts	CHARACTERISTICS @ 25° C: Illumination Sensitivity μa/fc	CHARACTERISTICS @ 25° C: Maximum Dark Current μa
4420	50	0.03	45	0.7	35
7467[e]	50	0.03	45	0.7	35

[a] All photocell types have S-15 spectral response except for type 6694A which has S-12 spectral response.

[b] Single crystal. [c] For renewal use. [d] S-14 spectral response.

[e] Type 7467 has maximum length of 0.875 inch and type 4420 has maximum length of 1.10 inches (excluding flexible leads).

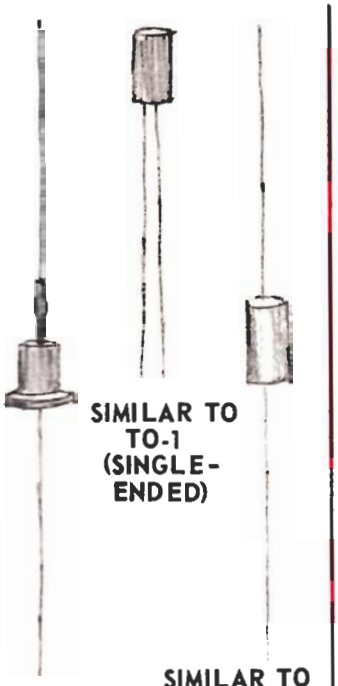
[f] Wavelength of maximum spectral response is 8600 ± 750 angstroms. The approximate spectral range at the 20 per cent points is from 4000 to 10,600 angstroms.

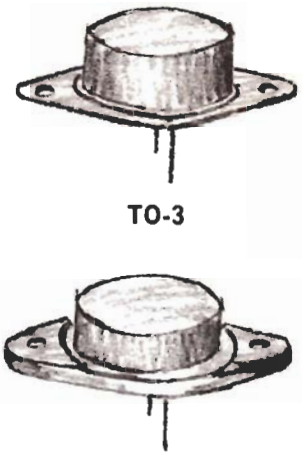
THESE TYPES ANNOUNCED JUST BEFORE PUBLICATION

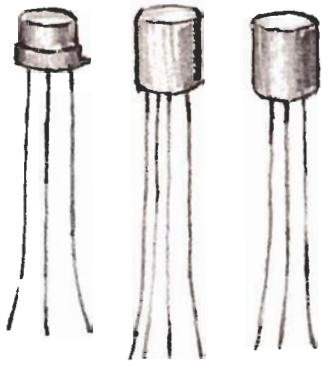
RCA Type	MAXIMUM RATINGS: V_{CBO} Volts	I_C Amp	P_T Watts	NOTES
NEW FOR AUDIO POWER				
2N2869/2N301	-60	-10	30	These new versions offer triple the current and dissipation of original type. (pnp germanium)
2N2870/2N301A	-80	-10	30	
NEW FOR VHF				
2N2873	-35	-0.01	0.115	Diffused - dot mesa germanium pnp 17 db neutralized power gain; 5 db noise typical at 175 Mc.
2N2876	80	2.5	17.5	10 watts output at 50 Mc (Si, npn) 3 watts output at 150 Mc
2N2631	80	1.5	9.75	7.5 watts output at 50 Mc - 3 watts output at 150 Mc (Si, npn)
NEW HIGH-SPEED SWITCHES				
2N960 through 2N967				Germanium Epitaxial Mesa PNP types: Low saturation voltages, high min f_T (250 - 300 Mc) at I_E = 20 ma
2N2938	25	0.25	1	Silicon npn type h_{FE} = 30 min at I_C = 50 ma; f_T = 690 Mc typ.
NEW FOR SMALL-SIGNAL MEDIUM-POWER & HIGH-SPEED SWITCHING				
2N718A	75	0.5	1.8	f_T min = 60Mc; pulsed beta = 20 min at I_C = 0.5 amp (Si, npn)
2N720A	120	0.5	1.8	High-Voltage type; f_T min = 60 Mc; V_{CER} = 100 volts for R_{BE} = 10 ohms
2N1893	120	0.5	3	Triple-diffused silicon npn planar type similar to RCA 2N2405
2N2405	120	1	5	Triple-diffused silicon npn planar type f_T = 120 Mc min; V_{CEO} (sus) controlled for R_{BE} = 0 ohms to 100K ohms; Min V_{CEO} (sus) = 90 volts
NEW ECONOMY TRANSISTORS				
40050	-40	-5	12.5	15 watts power output, class B push-pull
40051	-50	-5	12.5	25 watts power output, class B push-pull
40053	60	1	5	RCA triple-diffused silicon npn at an extremely low price (version of RCA 2N2102) min f_T = 100 Mc.

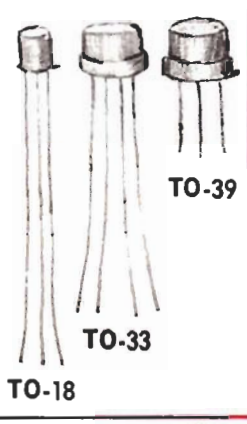
RCA'S NEW 2N2102 FAMILY	TO-5	TO-18	TO-46
High-Voltage Type	2N2405	2N2895	2N2898
Multiple Beta-Control Type	2N2102	2N2896	2N2899
Economy Type	2N2270	2N2897	2N2900

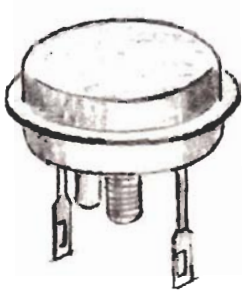
NEW 40-AMPERE STUD RECTIFIERS		
1N1187A	DO-5	PRV = 300
1N1188A	DO-5	PRV = 400
1N1189A	DO-5	PRV = 500
1N1190A	DO-5	PRV = 600

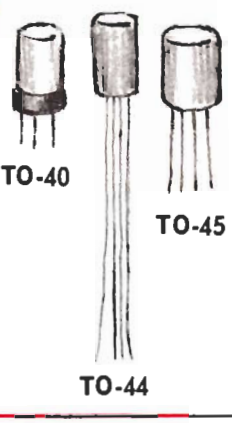


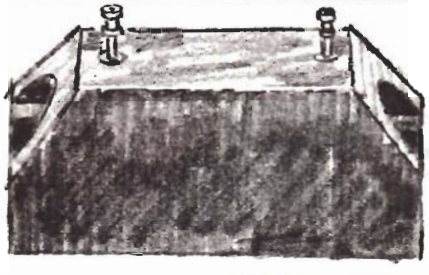


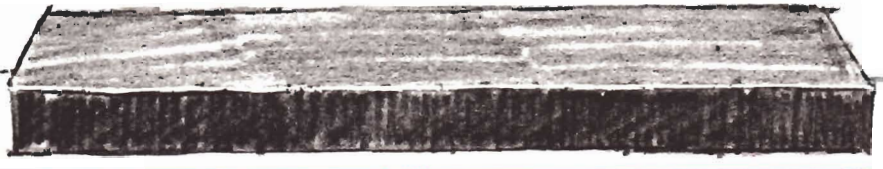












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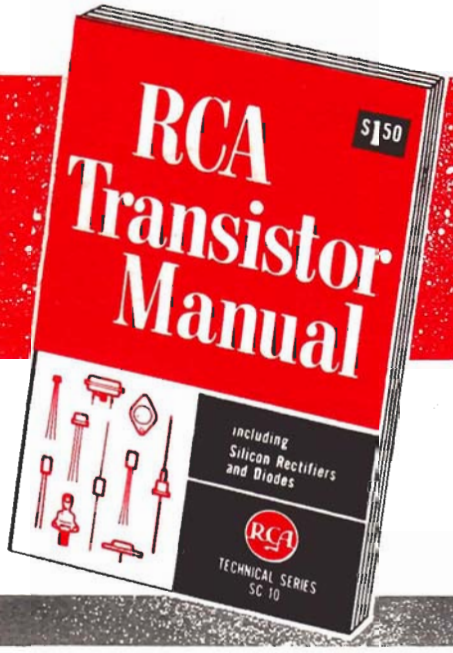

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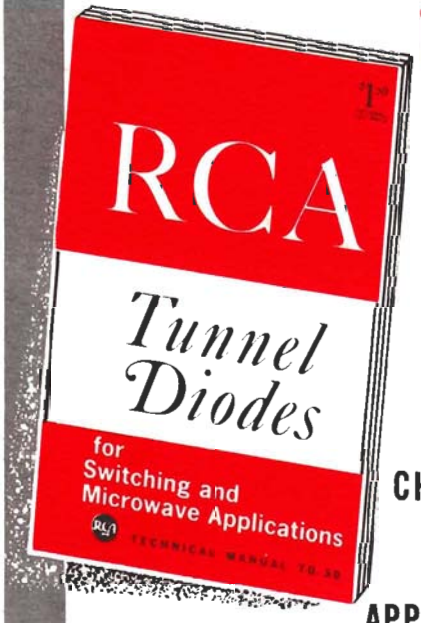

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