

# High-Frequency Transistors

Type No.	Package type	Applications	Absolute maximum ratings							Electrical characteristics (Ta = 25 °C)							
			VCBO (V)	VCEO (V)	VEBO (V)	IC (A)	PC (W)	Tj (°C)	ICBO max @ VCB		hFE @ VCE-IC			fT @ VCE-IC			
									ICBO max (µA)	VCB (V)	hFE	VCE (V)	IC (mA)	fT (MHz)	VCE (V)	IC (mA)	
1	2SA186	SMCP	HF amplifier	15	12	3	50m	150m	150	0.1	12	60 to 270	10	5	750	10	5
2	2SC4918	SMCP	HF amplifier	40	18	3	50m	150m	150	0.1	18	60 to 270	10	5	750	10	5
3	2SA185	MCP	HF amplifier	15	12	3	50m	150m	150	0.1	12	60 to 270	10	5	750	10	5
4	2SA185	MCP	HF amplifier	30	20	5	30m	150m	150	0.1	10	60 to 270	6	1	230	6	1
5	2SA168	MCP	HF amplifier	30	20	5	30m	150m	150	0.1	10	60 to 270	6	1	320	6	1
6	2SC4399	MCP	HF amplifier	40	18	3	50m	150m	150	0.1	18	60 to 270	10	5	750	10	5
7	2SC4399	CP	HF amplifier	30	20	5	30m	150m	125	0.1	10	60 to 270	6	1	230	6	1
8	2SA1580	CP	High-resolution CRT display video output amplifier	70	60	4	50m	200m	150	0.1	40	60 to 270	10	10	700	10	10
9	2SA181	CP	HF amplifier	15	12	3	50m	250m	150	0.1	12	60 to 270	10	5	750	10	5
10	2SC2814	CP	HF amplifier	30	20	5	30m	150m	125	0.1	10	40 to 270	6	1	320	6	1
11	2SC2814	CP	HF amplifier	25	20	3	30m	150m	125	0.1	10	40 to 180	6	1	750	6	4
12	2SC4104	CP	High-resolution CRT display video output amplifier	70	60	4	50m	200m	150	0.1	40	60 to 270	10	10	700	10	10
13	2SC4432	CP	HF amplifier	40	18	3	50m	250m	150	0.1	18	60 to 270	10	5	750	10	5
14	3SK263	CP4	HF amplifier VHF	15†	±8‡	±8§	30m	200m#	125**	-	-	2.5 to 24 mA††	6‡	-	14 mS‡‡	6‡	-
15	3SK264	CP4	HF amplifier VHF tuner	15†	±8‡	±8§	30m	200m#	125**	-	-	2.5 to 24 mA††	6‡	-	18 mS‡‡	6‡	-
16	FC119	CP6	HF amplifier (2SC2814#2)	30	20	5	30m	200m	150	0.1	10	80 to 200	6	1	320	6	1
17	FC120	CP6	HF amplifier (2SC31422#2)	25	20	3	30m	200m	150	0.1	10	80 to 200	6	1	750	6	4
18	FC156V	CP6	HF low-noise amplifier	20	10	2	70m	200m	150	1	10	0.95 typ	5	20	7G	5	20
19	FC157V	CP6	HF low-noise amplifier	20	10	1.5	30m	200m	150	1	10	0.95 typ	5	10	11G	5	10
20	2SA157	PCP	High-resolution CRT display video output amplifier	200	200	4	100m	1.3*	150	0.1	150	40 to 320	10	10	400	30	30
21	2SA172	PCP	High-resolution CRT display video output amplifier	30	20	3	300m	1.3*	150	0.1	20	15 to 100	5	50	1500	5	100
22	2SC4080	PCP	High-resolution CRT display video output amplifier	200	200	4	100m	1.3*	150	0.1	150	40 to 320	10	10	400	30	30
23	2SC4272	PCP	27 MHz CB transceiver driver	75	45	5	1	1.3*	150	1	40	60 to 320	5	500	250	10	50
24	2SC4504	PCP	High-resolution CRT display video output amplifier	30	20	3	300m	1.3*	150	0.1	20	40 to 200	5	50	2200	5	50
25	2SA117	SPA	HF amplifier	30	20	5	30m	150m	125	0.1	10	60 to 320	6	1	230	6	1
26	2SC2839	SPA	HF amplifier	30	20	5	30m	150m	125	0.1	10	60 to 320	6	1	320	6	1
27	2SC2999	SPA	HF amplifier	25	20	3	30m	150m	125	0.1	10	40 to 200	6	1	750	6	4
28	2SC4433	SPA	HF amplifier	40	18	3	50m	300m	150	0.1	18	40 to 200	10	5	750	10	5
29	2SC3000	NP	HF amplifier	30	20	5	30m	250m	125	0.1	10	60 to 320	6	1	320	6	1
30	2SC4735	FLP	27 MHz CB transceiver driver	75	75§§	5	1	1.5	150	1	40	60 to 320	5	500	250	10	50
31	2SC4910	FLP	VHF power amplifier	38	18	3	750m	1.5	150	50	30	20 to 200	10	200	-	-	-
32	2SC4910	TO126	27 MHz CB transceiver driver	75	45	5	1	750m	150	1	40	60 to 320	5	500	250	10	50

\* Mounted on a ceramic board (250 mm<sup>2</sup>±0.8 mm)  
 † VDS  
 ‡ VG1S  
 § VG2S  
 || ID  
 # PD

\*\* Tch  
 †† IDSX  
 ‡‡ |Yfs|  
 §§ VCER

Notes : Listed by package type and arranged in order of Type Number.  
 For PNP, the minus sign is omitted due to space limitations.  
 The standard version of the FLP package is available in radial taping form.

