

## Small-signal Transistors

(For low noise, high voltage and general use)

We have other small-signal transistors which are not included in any classified types nor packages in this document. They are for low noise, high voltage and general use.

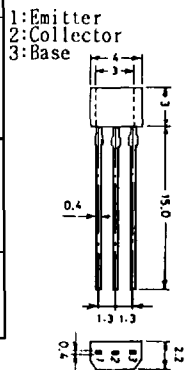
We have high voltage/general purpose transistors of various packages. See the tables.

### dc Low noise amp transistors \*:Tc=25°C

For PNP (-) sign is omitted.

Type No.	Package	Main use	Absolute Maximum Ratings/Ta=25°C				Electrical Characteristics/Ta=25°C									
			V <sub>CBO</sub>	V <sub>CEO</sub>	I <sub>C</sub>	P <sub>C</sub>	V <sub>CE</sub>	I <sub>C</sub>	h <sub>FE</sub>	V <sub>CE</sub>	I <sub>C</sub>	f <sub>T</sub>	I <sub>C</sub>	I <sub>B</sub>	V <sub>CE(sat)</sub>	
			(V)	(V)	(A)	(W)	(V)	(mA)		(V)	(mA)	typ (MHz)	(mA)	(mA)	typ max (V)	
2SA1016, K (with K) 2SC2362, K	NP	High voltage low noise amp	120 150	100 120	50m	0.4	6	1	160~960	6	1	110 130	10	1	0.5	
2SA1391 2SC3382		LF low noise amp	60	50	0.2	0.4	6	1	100~560	6	10	200 250	100	10	0.3	

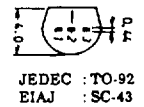
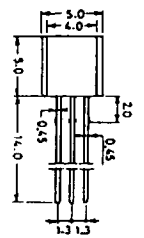
Case Outlines  
(unit:mm)  
SANYO:SPA



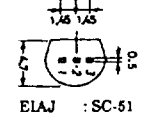
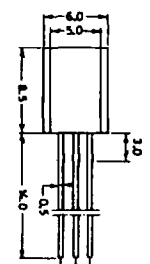
### dc High-voltage transistors

2SA1207 2SC2909	NP	High voltage switching	180	160	70m	0.6	5	10	100~400	10	10	150	30	3	0.14	0.4
2SA1319 2SC3332			180	160	0.7	0.7	5	100	100~400	10	50	120	250	25	0.2	0.5
2SA1699 2SC4002		High voltage drive	400	400	0.2	0.6	10	50	60~200	30	10	70	50	5	0.8	0.6
2SA1208 2SC2910	MP	High voltage switching	180	160	70m	0.9	5	10	100~400	10	10	150	30	3	0.14	0.4
2SA1209 2SC2911	TO-126		180	160	0.14	*10	5	10	100~400	10	10	150	50	5	0.14	0.4
2SA1248 2SC3116			180	160	0.7	*10	5	100	100~400	10	50	120	250	25	0.2	0.5
2SA1249 2SC3117			180	160	1.5	*10	5	100	100~400	10	50	120	500	50	0.12	0.5

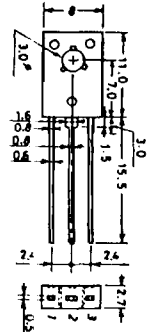
SANYO:NP



SANYO:MP



SANYO:TO-126



### dc General purpose transistors

2SA1683 2SC4414	SPA	LF drive	100	80	0.5	0.3	5	50	100~400	10	10	120	400	40	0.20	0.5
2SA1392 2SC3383	NP	LF power amp	60	50	0.2	0.4	6	1	100~560	6	10	200 250	100	10	0.3	
2SA1450 2SC3708		LF drive	100	80	0.5	0.6	5	50	100~400	10	10	120	400	40	0.2	0.5
2SB631, K 2SD600, K	TO-126	LF power amp	100, 120		1	*8	5	50	60~320	10	50	110 130	500	50	0.15	0.4
2SB632, K 2SD612, K			25, 35		2	*10	2	500	60~320	10	50	100	1500	150	0.4	0.9

These specifications are subject to change without notice.