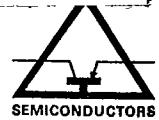


T-27-01



# TELEVISION/VIDEO DEVICES

## (c) High voltage/video amplifiers

TYPE NPN PNP	Maximum Ratings					Electrical Characteristics at Tj=25°C											
	P <sub>D</sub> T <sub>a</sub> =25°C W	P <sub>D</sub> T <sub>c</sub> =25°C W	V <sub>CB0</sub> V	V <sub>CE0</sub> V	V <sub>EB0</sub> V	I <sub>c</sub> mA	h <sub>FE</sub> @ min max	V <sub>CE</sub> V	I <sub>c</sub> mA	V <sub>CE (sat)</sub> @ I <sub>c</sub> max V	I <sub>c</sub> mA	I <sub>B</sub> mA	f <sub>T</sub> typ MHz	I <sub>CB0</sub> max nA	C <sub>OB</sub> typ pF	Case	
2N3440	1.0	10	300	250	6	1000	40 160	10	20	0.5	50	4	15	20†	10	TO-39	
2N5415	1.0	10	200	200	4	1000	30 150	10	50	2.5	50	5	15	50†	15	TO-39	
2N5416	1.0	10	350	300	6	1000	30 120	10	50	2.0	50	5	15	50†	15	TO-39	
BD115	1.0	6	245	180	5	200	22 -	100	50	9.0	100	10	145	-	-	TO-39	
SL305	0.8	3	150	150	5	100	25 -	10	30	1.0	20	2	70	100	5	TO-39	
SL306	0.8	3	200	175	5	100	25 -	10	30	1.0	20	2	70	100	5	TO-39	
SL307	0.8	3	250	200	5	100	25 -	10	30	1.0	20	2	70	100	5	TO-39	
SL308	0.8	3	300	275	5	100	25 -	10	30	1.0	20	2	70	100	5	TO-39	
SK305	0.8	3	150	150	5	500	25 -	10	30	1.0	20	2	15	50†	15	TO-39	
SK306	0.8	3	200	175	5	500	25 -	10	30	1.0	20	2	15	50†	15	TO-39	
SK307	0.8	3	250	200	5	500	25 -	10	30	1.0	20	2	15	50†	15	TO-39	
SK308	0.8	3	300	275	5	500	25 -	10	30	1.0	20	2	15	50†	15	TO-39	

† Leakage current is in  $\mu$ A.

TR

TYPE NPN	P <sub>D</sub> @ T <sub>a</sub> =25°C W	V <sub>CB0</sub> V	V <sub>CE0</sub> V	V <sub>EB0</sub> V	I <sub>C</sub> mA	h <sub>FE</sub> min/max	@ V <sub>CE</sub> /I <sub>C</sub> V/mA	V <sub>CE (sat)</sub> @ I <sub>C</sub> mA	I <sub>B</sub> mA	f <sub>T</sub> (TYP) MHz	I <sub>CB0</sub> max nA	C <sub>ob</sub> pF	Case
BF 336	3*	185	180	5	100	20/-	10 30	-	-	130	-	3	TO-39
BF 337	3*	250	200	5	100	20/-	10 30	-	-	130	-	3	TO-39
BF 338	3*	300	225	5	100	20/-	10 30	-	-	130	-	3	TO-39
D 115	0.4	245	180	5	200	22/-	100 50	9.0	100	145	-	-	TO-92
BF 393	0.8	300	300	8	-	40/-	10 10	2.0	20	2	50	-	TO-39/TO-92

\* P<sub>D</sub> @ T<sub>c</sub>=25°C

## (d) TV horizontal output applications

TR 11 & 18

TYPE NPN	P <sub>D</sub> @ T <sub>c</sub> =25°C W	V <sub>CB0</sub> V	V <sub>CE0</sub> V	V <sub>EB0</sub> V	I <sub>C</sub> max mA	h <sub>FE</sub> # min max	V <sub>CE</sub> /I <sub>C</sub> V A	V <sub>CE (sat)</sub> max # V	I <sub>C</sub> /I <sub>B</sub> @ A A	f <sub>T</sub> MHz	I <sub>CB0</sub> max nA	Case
BDY 23	87	60	60	10	6	15 180	4 2.0	1.0	2/0.25	10	-	TO-3
BDY 24	87	100	90	10	6	15 180	4 2.0	0.6	2/0.25	10	-	TO-3
BDY 25	87	200	140	10	6	15 180	4 2.0	0.6	2/0.25	10	-	TO-3
BU 184	60	400⊙	200	8	5	-	-	1.5	5/0.05	2.0 MHz	1.0†	TO-220
BU 205	10	1500	750	5	2.5	2 -	5 2.0	5.0	2/1.0	7500	1.0	TO-3
BU 206	10	1700	800	5	2.5	1.8 -	5 2.0	5.0	2/1.1	7500	1.0	TO-3
BU 208	12.5	1500	700	5	5	2.5 -	5 4.5	5.0	4.5/2.0	7000	1.0	TO-3
BU 208A	12.5	1500*	700	5	5	2.25 -	5 4.5	1.0	4.5/2.0	4.0 MHz	1.0†	TO-3
BU 208D	80	-	700	5	5	2.5 -	5	-	-	-	-	TO-3
BU 407D	60	330	150	6	7	-	-	1.3	5/0.65	10 MHz	-	TO-220
BU 536	50	-	480	7	8	5.5 -	-	-	-	-	-	TO-3
BUY 58	117	250	160	5	15	10 -	5 12	1.3	10/1.25	-	5.0†	TO-3
BUY 69A	100	1000	400	8	10	15 -	10 2.5	3.3	8/2.5	2.0 MHz	1.0†	TO-3
BUY 69B	100	800	325	8	10	15 -	10 2.5	3.3	8/2.5	2.0 MHz	1.0†	TO-3
BUY 69C	100	500	200	8	10	15 -	10 2.5	3.3	8/2.5	2.0 MHz	1.0†	TO-3
2SC 1413A	50	1500	500	6	5	-	-	-	-	-	-	TO-3
2SC1875	50	1500	500	6	3.5	5 25	10 2.0	10.3	2.5/0.6	-	20 $\mu$ A	TO-3
2SC2233	40	200	60	5	4	30 150	5 1.0	1.0	4/0.4	-	-	TO-3/TO-220
2SD820	50	1500	600	5	5	8 20	5 1.0	-	-	3.0 MHz	10 $\mu$ A	TO-3
2SD868	50	1500	600	5	2.5	8 12	5 0.5	8.0	2/0.6	3.0 MHz	10 $\mu$ A	TO-3
2SD870	50	1500	600	5	5	8 12	5 1.0	3.5	4/0.8	3.0 MHz	10 $\mu$ A	TO-3
2SD898	50	-	-	6	3	9.5 -	5 1.0	-	-	-	-	TO-3
2SD2233	40	200	60	5	4	20 40	5 4.0	-	-	-	-	TO-3

† I<sub>CEX</sub>    ⊙ V<sub>CEV</sub>

\* V<sub>CEX</sub>    # Pulse duration  $\leq$  300  $\mu$ s duty cycle  $\leq$  2%