

SMALL-SIGNAL TRANSISTORS & DIODES & MEDIUM-POWER RECTIFIERS

Tuner transistors & diodes

NPN TUNER TRANSISTORS

type number	ratings			characteristics ¹⁾					package
	V _{CEO} (V)	I _C (mA)	P _{tot} (mW)	f _T (MHz)	F @ f (dB) (MHz)	G _{UM} @ f (dB) (MHz)			
SURFACE-MOUNT TYPES									
BF547	20	50	300	1200	4.5	100	20	100	SOT23
BF547W	20	50	300	1200	4.5	100	20	100	SOT323
BF747	20	50	150	1200	4.5	100	20	100	SOT23
BFG67	10	50	300	8000	1.3	1000	17	1000	SOT143
BFR92A	15	25	300	5000	2.1	1000	14	1000	SOT23
BFR93A	12	35	300	6000	1.9	1000	13	1000	SOT23
BFS17	15	25	300	1000	4.5	500	-	-	SOT23
BFS17A	15	25	300	2800	2.5	800	13.5	800	SOT23

listed above is a selection of popular types for TV tuners;
for a complete overview of RF wideband transistors, see Philips Semiconductors Data Handbook SC14.

DUAL-GATE N-CHANNEL MOSFETS

type number	ratings		characteristics							package	remarks
	V _{DS} max. (V)	I _D max. (mA)	I _{DSS} min. (mA)	I _{DSS} max. (mA)	-V _{(P)G1-S} max. (V)	y _{fs} min. (mS)	C _{is} typ. (pF)	C _{os} typ. (pF)	F typ. (dB)		
SURFACE-MOUNT TYPES											
BF901 ²⁾	12	30	-	-	-0.7	25	2.4	1.4	1.7	SOT143	VHF/UHF
BF901R ²⁾	12	30	-	-	-0.7	25	2.4	1.4	1.7	SOT143R	VHF/UHF
BF904 ²⁾³⁾	7	30	-	-	-1	22	2.2	1.3	2.0	SOT143	VHF/UHF
BF904R ²⁾³⁾	7	30	-	-	-1	22	2.2	1.3	2.0	SOT143	VHF/UHF
BF904WR ²⁾³⁾	7	30	-	-	-1	22	2.2	1.3	2.0	SOT343R	VHF/UHF
BF908	12	40	3	27	2	36	3.1	1.7	1.5	SOT143	VHF/UHF
BF908R	12	40	3	27	2	36	3.1	1.7	1.5	SOT143R	VHF/UHF
BF908WR	12	40	3	27	2	36	3.1	1.7	1.5	SOT343R	VHF/UHF
BF909	7	40	-	-	-1	36	3.6	2.3	2.0	SOT143	VHF/UHF
BF909R	7	40	-	-	-1	36	3.6	2.3	2.0	SOT143R	VHF/UHF
BF909WR ²⁾	7	40	-	-	-1	36	3.6	2.3	2.0	SOT343R	VHF/UHF
BF989	20	20	2	20	2.7	9.5	1.8	0.9	2.8	SOT143	UHF
BF990A	18	30	-	-	1.3	18	2.6	1.2	2.0	SOT143	UHF
BF990AR	18	30	-	-	1.3	18	2.6	1.2	2.0	SOT143R	UHF
BF991	20	20	4	25	2.5	10	2.1	1.1	0.7	SOT143	VHF
BF992	20	40	-	-	1.3	20	4.0	2.0	1.2	SOT143	VHF
BF992R	20	40	-	-	1.3	20	4.0	2.0	1.2	SOT143R	VHF
BF994S	20	30	4	20	2.5	15	2.5	1.0	1.0	SOT143	VHF
BF996S	20	30	4	20	2.5	15	2.3	0.8	1.8	SOT143	UHF
BF997	20	30	2	20	2.5	15	2.5	1.0	1.0	SOT143	VHF
BF998	12	30	2	18	2.5	24 ⁴⁾	2.1	1.05	1.0	SOT143	VHF/UHF
BF998R	12	30	2	18	2.5	24 ⁴⁾	2.1	1.05	1.0	SOT143R	VHF/UHF
BF998WR	12	30	2	18	2.5	24 ⁴⁾	2.1	1.05	1.0	SOT343R	VHF/UHF
BF1100	14	30	-	-	-1	22	2.2	1.1	2.0	SOT143	VHF/UHF
BF1100R	14	30	-	-	-1	22	2.2	1.1	2.0	SOT143R	VHF/UHF
BF1100WR	14	30	-	-	-1	22	2.2	1.1	2.0	SOT343R	VHF/UHF

1) at 1 kHz
 2) enhancement types
 3) with internal biasing circuit; for 5 V applications
 4) typical value

