

RF Transistors for Broadcast Applications

Philips
FM Broadcast 87-108 MHz Bipolar Transistors

Type Number	Load Power @ 108 MHz (W)	Power Gain @ 108 MHz (dB)	Supply Voltage (V)	Envelope
Class B				
2N3866	1.8	10	28	TO-39/1
BLW90	4	20	28	SOT122
BLV21	15	10	28	SOT123
BLW86*	45	7.5	28	SOT123
BLX39*	45	7.5	28	SOT120
BLV80/28	80	10	28	SOT121
BLW76	80	8	28	SOT121
BLW78	100	6	28	SOT121
BLV25	175	10	28	SOT119
BLV37	250	10	28	SOT179

*Load power and power gain measured at 175MHz.

TV Transposer/Transmitter Transistors

Type Number	Output power P_o sync (W)	d_{im} (dB)	Output power (W) $P_o - 1dB$	Power Gain (dB)	Supply Voltage (V)	Envelope
Class A Bands I (41-68MHz) & III (174-230MHz)						
BLV30	1.5	-60	—	18	25	SOT122
BLV31	5	-58	—	15	25	SOT122
BLV32F	10	-55	—	16	25	SOT160
BLV33F	16	-55	—	13.5	25	SOT119
BLV33	19	-55	—	9	25	SOT147
Class AB Bands I (41-68MHz) & III (174-230MHz)						
BLV30	—	—	10	15	28	SOT122
BLV31	—	—	20	12	28	SOT122
BLV32F	—	—	30	13	28	SOT160
BLV33F	—	—	85	10.5	28	SOT119
BLV33	—	—	90	6.5	28	SOT147
BLV36	—	—	115	11	28	SOT161
BLV38	—	—	225	9.0	35	SOT179
Class A Bands IV & V 470-860 MHz						
BFR96S	0.12	-60	—	10	25	SOT37
BFG34	0.3	-60	—	11	25	SOT122
BLW32	0.5	-60	—	11	25	SOT122
BLX96	0.5	-60	—	6	25	SOT48
BFG68	0.7	-60	—	10	25	SOT122
BLW33	1	-60	—	10	25	SOT122
BLX97	1	-60	—	5.5	25	SOT48/3
BLW34	1.8	-60	—	9	25	SOT122
BLW98	3.5	-60	—	6.5	25	SOT122
BLX98	3.5	-60	—	5	25	SOT48/2
BLV57	6	-60	—	8	25	SOT161
Class AB Bands IV & V 470-860 MHz						
BLV57	—	—	30	6.5	25	SOT161
BLV59	—	—	30	7	25	SOT171