

DATA SHEET

Selection guide RF Power Modules and Transistors for Mobile Phones

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RF Power Modules and Transistors for Mobile Phones

Selection guide

VHF CAR MOBILE

V_S (V)	P_L (W)	f (MHz)	G_p (dB)	PACKAGE	TYPE NUMBER	PAGE
12.5	13	146 to 174	≥ 19.4	SOT132B	BGY143	
	18	68 to 88	≥ 22.6	SOT132B	BGY132	
	18	80 to 108	≥ 22.6	SOT132B	BGY133	
	18	132 to 156	≥ 20.8	SOT132B	BGY135	
	18	146 to 174	≥ 20.8	SOT132B	BGY136	

UHF PORTABLE

V_S (V)	P_L (W)	f (MHz)	G_p (dB)	PACKAGE	TYPE NUMBER	PAGE
6	≥ 3	400 to 440	≥ 24.8	SOT421A	BGY148A	
	≥ 3	430 to 488	≥ 24.8	SOT421A	BGY148B	
	3.5	400 to 440	≥ 35.5	SOT288D	BGY113E	
	3.5	430 to 470	≥ 35.5	SOT288D	BGY113F	
	3.5	470 to 520	≥ 35.5	SOT288D	BGY113G	
7.2	7	400 to 470	≥ 38.5	SOT434A	BGY152A	
	7	450 to 512	≥ 38.5	SOT434A	BGY152B	
7.5	7	400 to 440	≥ 38.5	SOT288D	BGY113A	
	7	430 to 470	≥ 38.5	SOT288D	BGY113B	

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SHF PORTABLE

V_S (V)	P_L (W)	f (MHz)	G_p (dB)	PACKAGE	TYPE NUMBER	PAGE
3.6	1.2	824 to 849	≥ 27.8	SOT388A	BGY120A	
	1.2	872 to 905	≥ 27.8	SOT388A	BGY120B	
	1.2	898 to 928	≥ 27.8	SOT388A	BGY120D	
4.8	1.2	824 to 849	≥ 27.8	SOT321	BGY118A	
	1.2	872 to 905	≥ 27.8	SOT321	BGY118B	
	1.2	898 to 928	≥ 27.8	SOT321	BGY118D	
	1.2	824 to 849	≥ 27.8	SOT359	BGY119A	
	1.2	872 to 905	≥ 27.8	SOT359	BGY119B	
	1.2	824 to 849	≥ 27.8	SOT388A	BGY122A	
	1.2	872 to 905	≥ 27.8	SOT388A	BGY122B	
6	1.2	824 to 849	≥ 27.8	SOT321	BGY115A	
	1.2	872 to 905	≥ 27.8	SOT321	BGY115B	
	1.2	902 to 928	≥ 27.8	SOT321	BGY115D	
	1.4	890 to 915	≥ 28.5	SOT321	BGY115C/P	
7.2	1.7	824 to 849	≥ 32.3	SOT246	BGY110D	
	1.7	872 to 905	≥ 32.3	SOT246	BGY110E	
	1.7	890 to 915	≥ 32.3	SOT246	BGY110F	
	1.7	902 to 928	≥ 32.3	SOT246	BGY110G	
	5	800 to 870	≥ 37	SOT434A	BGY172	

SHF CAR MOBILE

V_S (V)	P_L (W)	f (MHz)	G_p (dB)	PACKAGE	TYPE NUMBER	PAGE
12.5	6	800 to 870	≥ 37.8	SOT278B	BGY116D	
	6	824 to 849	≥ 37.8	SOT278A	BGY114A	
	6	872 to 905	≥ 37.8	SOT278A	BGY114B	
	6	890 to 950	≥ 37.8	SOT278B	BGY116E	
	8	890 to 915	≥ 39.0	SOT278A	BGY114C	

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GSM

V_S (V)	P_L (W)	f (MHz)	G_p (dB)	PACKAGE	TYPE NUMBER	PAGE
4.8	2.8	880 to 915	≥ 21.8		BGY209	
	3	880 to 915	≥ 27.8	SOT359A	BGY207	
	3	880 to 915	≥ 30	SOT388A	BGY206	
	3.5	880 to 915	≥ 32.5	SOT321B	BGY204	
6	1.4	880 to 915	≥ 28.5	SOT321	BGY202	
	2	1710 to 1785	≥ 27	SOT321B	BGY210	
	3.2	880 to 915	≥ 35	SOT342	BGY203	
	3.5	880 to 915	≥ 32.5	SOT321B	BGY205	
6.8	3.5	880 to 915	≥ 30.7	SOT388A	BGY208	
12.5	14	890 to 915	≥ 41.5	SOT278A	BGY201	

TRANSISTORS FOR MOBILE PHONES

TYPE NUMBER	V_{CE} (V)	P_L (W)	G_p (dB)	PACKAGE	PAGE
Analog cellular					
BLT61 ⁽¹⁾	3.6	1.2	>8	SO8, SOT96	
BLT70	4.8	0.6	>6	SOT223	
BLT71	4.8	1.2	>6	SOT223	
BLT71/8	4.8	1.2	≥ 11	SO8, SOT96	
BLT80	6	0.8	7	SOT223	
	7.5	0.8	8	SOT223	
BLT81	6	1.2	6.5	SOT223	
	7.5	1.2	8	SOT223	
Digital cellular					
BLT62 ⁽¹⁾	3.6	3	≥ 8	SO8, SOT96	
BLT14 ⁽¹⁾	4.8	1.6	≥ 6	SO8, SOT96	
BLT72 ⁽¹⁾	4.8	3	>7	SO8, SOT96	
BLT13 ⁽¹⁾	6	2	>6	SO8, SOT96	
BLT82	6	3.5	>8	SO8, SOT96	

Note

1. Preliminary specification.

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TRANSISTORS FOR MOBILE PHONES

TYPE NUMBER	V _{CEO} (V)	I _c (mA)	P _{tot} (mW)	PACKAGE	PAGE
BFG10W/X	10	250	400	SOT343	
BFG11W/X	8	500	760	SOT343	
BFG520W	15 ⁽¹⁾	70	500	SOT343	
BFG520W/X	15 ⁽¹⁾	70	500	SOT343	
BFG520W/XR	15 ⁽¹⁾	70	500	SOT343	
BFG540W	15 ⁽¹⁾	120	500	SOT343	
BFG540W/X	15 ⁽¹⁾	120	500	SOT343	
BFG540W/XR	15 ⁽¹⁾	120	500	SOT343	

Note

1. V_{CES}.

HYBRID AMPLIFIERS

TYPE NUMBER	V _{S1} (V)	V _{S2} (V)	P _L (W)	G _p (dB)	PACKAGE	PAGE
BGY1816 ⁽¹⁾	5	26	16	≥24	SOT365	
BGY916 ⁽¹⁾	26	26	16	≥28	SOT365	

Note

1. Preliminary specification.