Small Signal Metal

TO-18 METAL TRANSISTORS (NPN TYPES)

GENERAL PURPOSE SWITCH AND AMPLIFIER

Device Type	Polarity	V_{CEO} V_{CER} (+) (V_{DC})	I_C max. (mA)	H_{FE} min. @	I_C (mA)	V_{CE} (V)
BC107,A,B	NPN	45	100	110	2	5
BC108,A,B,C	NPN	20	100	110	2	5
BCY58	NPN	32	200	120	2	5
BCY59	NPN	45	200	120	2	5
BCY65E	NPN	60	200	120	2	5
BSX51	NPN	25	200	75	2	4.5
BSX51A	NPN	50	200	75	2	4.5
BSX51B	NPN	60	200	75	2	4.5
BSX52	NPN	25	200	180	2	4.5
BSX52A	NPN	50	200	180	2	4.5
BSX52B	NPN	60	200	180	2	4.5
2N718	NPN	40 (+)	–	40	150	10
2N718A	NPN	50 (+)	–	40	150	10
2N2221	NPN	30	800	40	150	10
2N2221A	NPN	40	800	40	150	10
2N2222	NPN	30	800	100	150	10
2N2222A	NPN	40	800	100	150	10

LOW NOISE AMPLIFIER

Device Type	Polarity	V_{CEO} (Vdc)	I_C max. (mA)	H_{FE} min. @ –	I_C (mA)	V_{CE} (Volts)
BC109	NPN	20	30	200	2	5
2N929	NPN	45	30	40	0.01	5
2N930	NPN	45	30	100	0.01	5
2N2483	NPN	60	50	100	0.5	5
2N2484	NPN	60	50	200	0.5	5

PDF Support

TO-18 METAL TRANSISTORS (PNP TYPES)

GENERAL PURPOSE SWITCH AND AMPLIFIER

Device Type	Polarity	V_{CEO} (Volts)	I_C max. (mA)	H_{FE} min. @	I_C (mA)	V_{CE} (Volts)
BC177	PNP	45	100	70	2	5.0
BC178	PNP	30	100	70	2	5.0
BCY77	PNP	60	100	120	2	5.0
BCY78	PNP	32	200	120	2	5.0
BCY79	PNP	45	200	120	2	5.0
BSW21	PNP	25	200	75	2	4.5
BSW21A	PNP	50	200	75	2	4.5
BSW22	PNP	25	200	180	2	4.5
BSW22A	PNP	50	200	180	2	4.5
2N2906	PNP	40	600	40	150	10
2N2906A	PNP	60	600	40	150	10
2N2907	PNP	40	600	100	150	10
2N2907A	PNP	60	600	100	150	10

LOW NOISE AMPLIFIER

Device Type	Polarity	V_{CEO} (Volts)	I_C max. (mA)	H_{FE} min. @	I_C (mA)	V_{CE} (Volts)
BC179	PNP	20	100	120	2	5

V_{CE} @ (volts)	I_C (mA)	I_B (mA)	F_T min. (MHz)	@ I_C (mA)	Compl. Type	Comments
0.6	100	5	150	10	BC177	Exists in A, B, H_{FE} groups
0.6	100	5	150	10	BC178	Exists in A, B and C, H_{FE} groups
0.7	100	2.5	125 (+)	10	BCY77	Exists VII, VIII, IX, X, H_{FE} groups
0.7	100	2.5	125	10	BCY78	
0.7	50	1.25	125 (+)	10	BCY79	
0.3	50	3	150	10	BSW21	
0.3	50	3	150	10	BSW21A	
0.3	50	3	150	10	BSW21B	
0.3	50	3	150	10	BSW22	
0.3	50	3	150	10	BSW22A	
0.3	50	3	150	10	BSW22B	
1.5	150	15	–	–		
1.5	150	15	60	50		
0.4	150	15	250	20	2N2906	
0.3	150	15	250	20	2N2906A	
0.4	150	15	250	20	2N2907	
0.3	150	15	300	20	2N2907A	

F = 1 KHz N_F max. @ (dB)	V_{CE} (Vdc)	I_C (mA)	F_T min. @ (MHz)	I_C (mA)	Compl. Type	Comments
4	5	0.2	150	10	BC179	Exists in B,C, H_{FE} groups
4	5	0.2	30	0.5		Exists in A, version
4	5	0.2	30	0.5		
4	5	0.01	12	0.05		
3	5	0.01	15	0.05		

V_{CE} (sat) max. (V)	I_C (mA)	I_B (mA)	F_T (MHz) + Type min.	I_C (mA)	Comp. Type	Comments
0.6	100	5	130	10	BC107	Exist VI, A, B H_{FE} Range
0.6	100	5	130	10	BC108	
0.8	50	1.25	180+	10	BCY58	Exist VII, VIII, IX, X Group
0.8	100	2.5	180+	10	BCY59	Exist H_{FE} Group VII, VIII, IX, X
0.8	100	2.5	180+	10	BCY65E	
0.5	50	3	150	10	BSX51	
0.5	50	3	150	10	BSX51A	
0.5	50	3	150	10	BSX52	
0.5	50	3	150	10	BSX52A	
0.4	150	15	200	50	2N2221	
0.4	150	15	200	50	2N2221A	
0.4	150	15	200	50	2N2222	
0.4	150	15	200	50	2N2222A	

F = 1 KHz N_F max. (dB) @	I_C (mA)	I_C (mA)	F_T (MHz) @	I_C (mA)	Comp. Type	Comments
4	0.2	5	130	10	BC109	Exists A, B, C H_{FE} Group