NPN Low Level Amplifiers

Device No.	Case Style	V_{CBO} (V) Min	V_{CEO} (V) Min	V_{EBO} (V) Min	I_{CBO} (nA) Max @	V_{CB} (V)	h_{FE} Min	h_{FE} Max	@ I_C (mA)	& V_{CE} (V)	$V_{CE(SAT)}$ (V) Max &	$V_{BE(SAT)}$ (V) Min	$V_{BE(SAT)}$ (V) Max @	I_C (mA)	C_{ob} (pF) Max	f_T (MHz) Min @	I_C (mA)	NF (dB) Max	Test Conditions	Process No.
MPSA18	TO-92 (92)	45	45	6.5	50	30	400		0.01	5	0.3			50	3	100	1	1.5	(Note 4)	07
							500		0.1	5										
							500		1	5										
							500	150	10	5										
2N5088	**TO-92 (92)**	**35**	**30**	**5**	**50**	**20**	**300**		**10**	**5**	**0.5**			**10**	**4**			**3**	**(Note 3)**	**07 (5-102)**
							350		**1**	**5**										
							300	**900**	**0.1**	**5**										
2N5089	**TO-92 (92)**	**30**	**25**	**4.5**	**50**	**15**	**400**		**10**	**5**	**0.5**			**10**	**4**			**2**	**(Note 3)**	**07 (5-102)**
							450		**1**	**5**										
							400	**120**	**0.1**	**5**										
2N5210	TO-92 (92)	50	50		50	35	250		10	5	0.7			10	4	30	0.5	3	(Note 4)	07
							250		1	5										
							250	600	0.1	5										
2N5961	TO-92 (92)	60	60	8	2	45	100		0.01	5	0.2			10	4	100	10	6	(Note 7)	07
							120		0.1	5										
							135		1	5								3	(Note 5)	
																		3	(Note 2)	
							150	700	10	5										
2N5962	TO-92 (92)	45	45	8	2	30	450		0.01	5	0.2			10	4	100	10	6	(Note 6)	07
							500		0.1	5								4	(Note 7)	
							550		1	5								8	(Note 8)	
																		3	(Note 5)	
							600	140	10	5								3	(Note 2)	
PN2484	TO-92 (92)	60	60	6	10	45		800	10	5	0.35			10	6			3	(Note 1)	07
							250		1	5										
							200		0.5	5										
							175		0.1	5										
							100	500	0.01	5										
							30		0.001	5										

NOTE: National preferred device for each process in **bold**. Number shown in parentheses indicates location **(section-page)** of device datasheet.

NPN Low Level Amplifiers (continued)

Device No.	Case Style	V_{CBO} (V) Min	V_{CEO} (V) Min	V_{EBO} (V) Min	I_{CBO} (nA) Max @	V_{CB} (V)	h_{FE} Min	h_{FE} Max	@ I_C (mA)	& V_{CE} (V)	$V_{CE(SAT)}$ (V) Max &	$V_{BE(SAT)}$ (V) Min	$V_{BE(SAT)}$ (V) Max @	I_C (mA)	C_{ob} (pF) Max	f_T (MHz) Min @	I_C (mA)	NF (dB) Max	Test Conditions	Process No.
PN930	TO-92 (92)	45	45	5	10	45		600	10	5	1	0.6	1	10	8	30	0.5	3	(Note 1)	07
							150		0.5	5										
							100	300	0.1	5										
2N3859A	TO-92 (94)	60	60	6	500	18	100	200	10	1					4	90	2			10
							75		1	1										
MPS6521	TO-92 (92)		25	4	50	30	300	600	2	10	0.5			50	3.5			3	(Note 1)	10
							150		0.1	10										
TIS97	TO-92 (97)		40		10	40	250	700	0.1	5								3	(Note 4)	10

TEST CONDITIONS

Note 1: I_C = 10 µA, V_{CE} = 5V, f = 10 Hz - 15.7 kHz.
Note 2: I_C = 10 µA, V_{CE} = 5V, f = 10 kHz - 10 Hz, R_S = 10 kΩ.
Note 3: I_C = 5 µA, V_{CE} = 5V, f = 1 kHz.
Note 4: I_C = 100 µA, V_{CE} = 5V, f = 10 Hz - 15.7 kHz.
Note 5: I_C = 10 µA, V_{CE} = 5V, f = 1 kHz, R_S = 10 kΩ.
Note 6: I_C = 100 µA, V_{CE} = 5V, f = 1 kHz, R_S = 1 kΩ.
Note 7: I_C = 100 µA, V_{CE} = 5V, f = 1 kHz, R_S = 10 kΩ.
Note 8: I_C = 100 µA, V_{CE} = 5V, f = 1 kHz, R_S = 100 kΩ.