

[Leaded type]

●TO-92 / NPN type

General purpose small signal amplifiers



TO-92 package

Product name	Pin arrangement	BV _{CBO} Min. (V)	BV _{CEO} Min. (V)	BV _{EBO} Min. (V)	I _{CBO} Max. (nA)	@V _{CB} (V)	h _{FE}		V _{CE} (sat) V _{BE} (sat)			Cob Max. (pF)	fr Min. (MHz)	@I _C (mA)	NF (dB)	I _C Max. (mA)	DIE NO.	
							Min.	Max.	Max.	Max.	@I _C @V _{CE} (mA) (V)							Max.
2N2925	ECB	25	25	5	100	25	235	470	2	10			10	160 (Typ.)		200	C22	
2N5232A	ECB	70	50	5	100	50	250	500	2	5	0.125	10	4		5	100	C22	
MPS8097	EBC	60	40	6	30 10 μ	40 60	250	700	0.1	5	0.65 (V _{BE(ON)})	100	4	200	10	2	100	C22
MPSA20	EBC	40	40	4	100	30	40	400	5	10	0.25	10	4	125	5	100	C22	
MPS8098	ECB	60	60	6	100	60	100	300	1	5	0.4	0.3	100	6	150	10	200	C22
PN918	ECB	30	15	3	100	15	20		3	1	0.4	1	1	3	600	4	50	C33
RJE9014C	ECB	—	40	—	—	—	60	1000	—	—	—	—	—	—	—	150	C22	
RJE9018G	ECB	—	19	—	—	—	72	146	—	—	—	—	—	—	—	50	C33	

General purpose amplification and switching

Product name	Pin arrangement	BV _{CBO} Min. (V)	BV _{CEO} Min. (V)	BV _{EBO} Min. (V)	I _{CBO} Max. (nA)	@V _{CB} (V)	h _{FE}		@I _C @V _{CE} (mA) (V)	V _{CE} (sat) V _{BE} (sat)		Cob Max. (pF)	f _r Min. (MHz)	@I _C (mA)	t _{off} Max. (ns)	I _C Max. (mA)	DIE NO.		
							Min.	Max.		Max.	Max.							@I _C (mA)	
PN2222A	EBC	75	40	6	100	60	35		0.1	10	0.3 1	1.2 2	150 500	8	250	20	285	600	C31
							50		1.0	10									
							75	300	10	10									
							100		150	10									
							50		150	1									
2N3904	EBC	60	40	6	50 (I _{CEX})	30	40		0.1	1	0.2 0.3	0.85 0.95	10 50	4	300	10	250	200	C37
							70	300	1	1									
							150		10	1									
							60		50	1									
							30		100	1									
2N4401	EBC	60	40	6	50	30	20		0.1	1	0.4 0.75	0.95 1.2	150 50	6.5	250	20	225	600	C31
							40		1	1									
							80	300	10	1									
							100		150	1									
							40		500	2									
MPS6515	EBC	40	25	4	50	30	250 150	500 100	2 100	10 10	0.5		50	3.5	250	10	NF 2dB	100	C22
MPS6531	EBC	60	40	5	50	40	60		10	1	0.3	1.0	100	5	390 Typ.			600	C31
							90	270	100	1									
							50		500	10									

Medium power amplification

Product name	Pin arrangement	BV _{CBO} Min. (V)	BV _{CEO} Min. (V)	BV _{EBO} Min. (V)	I _{CBO} Max. (nA)	@V _{CB} (V)	h _{FE}		@I _C @V _{CE} (mA) (V)	V _{CE} (sat) V _{BE} (sat)		Cob Max. (pF)	f _r Min. (MHz)	@I _C (mA)	t _{off} Max. (ns)	I _C Max. (mA)	DIE NO.
							Min.	Max.		Max.	@I _C (mA)						
MPSA06	EBC	80	80	4	100	80	100		10	1	0.25	100		50	10	500	D16
2N5551	EBC	180	160	6	50		56	270	10	5	0.2	1	1	6	50	600	C329

Darlington pair type

Product name	Pin arrangement	BV _{CBO} Min. (V)	BV _{CEO} Min. (V)	BV _{EBO} Min. (V)	I _{CBO} Max. (nA)	@V _{CB} (V)	h _{FE}		@I _C @V _{CE} (mA) (V)	V _{CE} (sat) V _{BE} (sat)		Cob Max. (pF)	f _r Min. (MHz)	@I _C (mA)	NF Max. (dB)	I _C Max. (mA)	DIE NO.
							Min.	Max.		Max.	@I _C (mA)						
2N6426	EBC	40	40	12	50	30	20k	200k	10	5	1.2	5	7		10	500	D25
							30k	300k	100	5	1.5						
							20k	200k	500	5	2						
MPSA13	EBC	(V _{CEs}) 30		10	100	30	5k		10	5	1.5	100	10	125	10	500	D25
MPSA28	EBC	(V _{CEs}) 80		12	100	60	10k		10	5	1.5	100	8	125	10	500	D69
							10k		100	5							
MPSA29	EBC	(V _{CEs}) 100		12	100	80	10k		10	5	1.2	10	8	125	10	500	D69
							10k		100	5							

Note: TO-92 will be shipped to any country other than Japan.