

# Small Signal Transistors

## TO-92 Case (Continued)



TO-92



TO-92-18R

TYPE NO.	DESCRIPTION	LEAD CODE	V <sub>CBO</sub>	V <sub>CEO</sub>	V <sub>EBO</sub>	I <sub>CBO</sub> @	V <sub>CB</sub>	h <sub>FE</sub>		@ V <sub>CE</sub>	@ I <sub>c</sub>	V <sub>CE</sub> (SAT) @ I <sub>c</sub>		C <sub>ob</sub>	f <sub>T</sub>	NF	t <sub>off</sub>
			(V)	(V)	(V)	(nA)	(V)			(V)	(mA)	(V)	(mA)	(pF)	(MHz)	(dB)	
			MIN	V <sub>CES</sub> MIN	MAX	*I <sub>CES</sub> MAX	*I <sub>CEV</sub> MAX	MIN	*h <sub>FE</sub> (1kHz) MAX					*C <sub>rb</sub> MAX	*TYP MIN	MAX	MAX
2N4401	NPN AMPL/SWITCH	EBC	60	40	6.0	100*	35	100	300	1.0	150	0.75	500	6.5	250	--	255
2N4402	PNP AMPL/SWITCH	EBC	40	40	5.0	100*	35	50	150	2.0	150	0.75	500	8.5	150	-	255
2N4403	PNP AMPL/SWITCH	EBC	40	40	5.0	100*	35	100	300	2.0	150	0.75	500	8.5	200	--	255
2N4410	NPN LOW NOISE	EBC	120	80	5.0	10	100	60	400	1.0	10	0.20	1.0	12	60	--	--
2N4424	NPN LOW NOISE	ECB	60	40	5.0	30	40	180	540	0.45	0.30	50	--	--	--	--	--
2N4952	NPN AMPL/SWITCH	ECB	60	30	5.0	50	40	100	300	10	150	0.30	150	8.0	250	--	400
2N4953	NPN AMPL/SWITCH	ECB	60	30	5.0	50	40	200	600	10	150	0.30	150	8.0	250	--	400
2N5086	PNP LOW NOISE	EBC	50	50	3.0	10	10	150	500	5.0	0.10	0.30	10	4.0	40	3.0	--
2N5087	PNP LOW NOISE	EBC	50	50	3.0	10	10	250	800	5.0	0.10	0.30	10	4.0	40	2.0	--
2N5088	NPN LOW NOISE	EBC	35	30	4.5	50	20	300	900	5.0	0.10	0.50	10	4.0	50	3.0	--
2N5089	NPN LOW NOISE	EBC	30	25	4.5	50	15	400	1,200	5.0	0.10	0.50	10	4.0	50	2.0	--
2N5172	NPN LOW NOISE	ECB	25	25	5.0	100	25	100	500	10	10	0.25	10	13	200*	--	--
2N5209	NPN LOW NOISE	EBC	50	50	4.5	50	35	100	300	5.0	0.10	0.70	10	4.0	30	3.0	--
2N5210	NPN LOW NOISE	EBC	50	50	4.5	50	35	200	600	5.0	0.10	0.70	10	4.0	30	2.0	--
2N5223	NPN AMPL/SWITCH	EBC	25	20	3.0	100	10	50	800	0.70	10	1.20	10	4.0	150	--	--
2N5225	NPN AMPL/SWITCH	EBC	25	25	4.0	300	15	30	600	10	50	0.80	100	20	50	--	--
2N5226	PNP AMPL/SWITCH	EBC	25	25	4.0	300	15	30	600	10	50	0.80	100	8.0	50	--	--
2N5227	PNP LOW NOISE	EBC	30	30	3.0	100	10	50	700	10	2.0	0.40	10	10	100	--	5.0
2N5232A	NPN LOW NOISE	ECB	70	50	5.0	30	50	250	500	5.0	2.0	0.125	10	4.0	--	5.0	--
2N5306	NPN DARLINGTON	ECB	25	25	12	100	25	7,000	70,000	5.0	2.0	1.40	200	10	60	--	--
2N5308	NPN DARLINGTON	ECB	40	40	12	100	40	7,000	70,000	5.0	2.0	1.40	200	10	60	--	--
2N5356	PNP AMPL/SWITCH	ECB	25	25	4.0	100	25	250	500	1.0	50	0.25	50	8.0	250*	--	--
2N5366	PNP AMPL/SWITCH	ECB	40	40	4.0	100	40	100	300	1.0	50	0.25	50	8.0	250*	--	--
2N5367	PNP AMPL/SWITCH	ECB	40	40	4.0	100	40	250	500	1.0	50	0.25	50	8.0	250*	--	--
2N5374	PNP AMPL/SWITCH	CBE†	60	30	5.0	50	40	200	400	10	150	0.30	150	10	150	--	--
2N5375	PNP AMPL/SWITCH	CBE†	40	30	5.0	50	30	40	400	10	150	0.30	150	10	150	--	--
2N5376	NPN AMPL/SWITCH	CBE†	60	30	5.0	10	30	120	--	5.0	1.0	--	--	8.0	--	--	--
2N5377	NPN AMPL/SWITCH	CBE†	60	30	5.0	10	30	120	--	5.0	1.0	--	--	8.0	--	--	--
2N5381	NPN AMPL/SWITCH	CBE†	60	40	6.0	50	30	100	300	1.0	10	12	10	4.0	300	5.0	--
2N5383	PNP AMPL/SWITCH	CBE†	40	40	5.0	50	30	100	300	1.0	10	0.25	10	4.5	250	4.0	--
2N5400	PNP HIGH VOLTAGE	EBC	130	120	5.0	100	100	40	180	5.0	10	0.50	50	6.0	100	8.0	--
2N5401	PNP HIGH VOLTAGE	EBC	160	150	5.0	50	120	60	240	5.0	10	0.50	50	6.0	100	8.0	--
2N5447	PNP AMPL/SWITCH	CBE†	40	25	5.0	100	20	60	300	5.0	50	0.25	50	12	100	--	--
2N5448	PNP AMPL/SWITCH	CBE†	50	30	5.0	100	20	30	150	5.0	50	0.25	50	12	100	--	--
2N5449	NPN AMPL/SWITCH	CBE†	50	30	5.0	100	20	100	300	2.0	50	0.6	100	12	100	--	--
2N5450	NPN AMPL/SWITCH	CBE†	50	30	5.0	100	20	50	150	2.0	50	0.8	100	12	100	--	--
2N5451	NPN AMPL/SWITCH	CBE†	40	20	5.0	100	20	30	600	2.0	50	1.0	100	12	100	--	--
2N5550	NPN HIGH VOLTAGE	EBC	160	140	6.0	100	100	60	250	5.0	10	0.25	50	6.0	100	10	--
2N5551	NPN HIGH VOLTAGE	EBC	180	160	6.0	50	120	80	250	5.0	10	0.20	50	6.0	100	8.0	--
2N5769	NPN SAT SWITCH	EBC	40	15	4.5	400	20	40	120	0.35	10	0.50	100	4.0	500	--	18
2N5770	NPN RF OSC	EBC	30	15	3.0	10	15	50	200	1.0	8.0	0.40	10	1.1	800	--	--
2N5771	PNP SAT SWITCH	EBC	15	15	4.5	10	8.0	50	120	0.30	10	0.60	50	3.0	850	--	20
2N5772	NPN SAT SWITCH	EBC	40	15	5.0	500*	20	30	120	0.40	30	0.50	300	5.0	350	--	28
2N5810	NPN AMPL/SWITCH	CBE†	35	25	5.0	100	25	60	200	2.0	2.0	0.75	500	15	100	--	--
2N5811	PNP AMPL/SWITCH	CBE†	35	25	5.0	100	25	60	200	2.0	2.0	0.75	500	15	100	--	--

Devices are available lead formed,  
See pages 216 thru 219 for details.  
Also available in Ammpack or Tape & Reel,  
See pages 230 thru 235 for details.  
† TO-92-18R

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