

Small Signal Transistors

TO-92 Case (Continued)



TO-92



TO-92-18R

TYPE NO.	DESCRIPTION	LEAD CODE	V _{CBO}	V _{CEO}	V _{EBO}	I _{CBO} @	V _{CB}	h _{FE}		@ V _{CE}	@ I _C	V _{CE} (SAT) @ I _C		C _{ob}	f _T	NF	t _{off}
			(V)	(V)	(V)	(nA)	(V)		h _{FE} (1kHz)	(V)	(mA)	(V)	(mA)	(pF)	(MHz)	(dB)	
			MIN	*V _{CES} MIN	MAX	*I _{CES} *I _{CEV} MAX								*C _{rb} 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 Ammopack or Tape & Reel,
See pages 230 thru 235 for details.
† TO-92-18R

(6-December 2004)

Central
Semiconductor Corp.
www.centalsemi.com

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centrasemi.com/terms

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Central Semiconductor:](#)

[2N5226 TIN/LEAD](#) [2N4410 TIN/LEAD](#)