

# Small Signal Transistors

## TO-39 Case (Continued)



TYPE NO.	DESCRIPTION	V <sub>CBO</sub>	V <sub>CEO</sub>	V <sub>EBO</sub>	I <sub>CBO</sub>	@ V <sub>CB</sub>	h <sub>FE</sub>		@ I <sub>C</sub>	@ V <sub>CE</sub>	V <sub>CE(SAT)</sub>	@ I <sub>C</sub>	f <sub>T</sub>	C <sub>ob</sub>	t <sub>on</sub>	t <sub>off</sub>	NF
		(V)	(V)	(V)			(μA)	(V)			(mA)		(V)	(MHz)	(pF)	(ns)	(ns)
		MIN	MIN	MIN	*I <sub>CEO</sub> **I <sub>CES</sub> ***I <sub>CEV</sub> ****I <sub>CER</sub>		MIN	MAX			MAX		MIN	MAX	MAX	MAX	MAX
2N4030	PNP AMPL/SWITCH	60	60	5.0	0.50	50	40	120	100	5.0	0.50	500	100	20	--	--	--
2N4031	PNP AMPL/SWITCH	80	80	5.0	0.50	60	100	300	100	5.0	0.50	500	150	20	--	--	--
2N4032	PNP AMPL/SWITCH	60	60	5.0	0.50	50	40	120	100	5.0	0.50	500	100	20	--	--	--
2N4033	PNP AMPL/SWITCH	80	80	5.0	0.05	60	100	300	100	5.0	0.50	500	150	20	--	--	--
2N4036	PNP AMPL/SWITCH	90	65	7.0	1.0	90	40	140	150	10	0.65	150	60	30	--	--	--
2N4037	PNP AMPL/SWITCH	60	40	7.0	0.25	60	50	250	150	10	1.40	150	60	30	--	--	--
2N4046	NPN CORE DRIVER	50	30	6.0	1.70	40	40	150	100	1.0	0.75	1,000	250	12	35	60	--
2N4047	NPN CORE DRIVER	80	50	6.0	1.70	60	40	150	100	1.0	0.95	1,000	250	10	35	60	--
2N4234	PNP AMPL/SWITCH	40	40	7.0	100	40	30	150	250	1.0	0.60	1,000	3.0	100	--	--	--
2N4235	PNP AMPL/SWITCH	60	60	7.0	100	60	30	150	250	1.0	0.60	1,000	3.0	100	--	--	--
2N4236	PNP AMPL/SWITCH	80	80	7.0	100	80	30	150	250	1.0	0.60	1,000	3.0	100	--	--	--
2N4237	NPN POWER AMPL	50	40	6.0	100	50	30	150	250	1.0	0.60	1,000	2.0	100	--	--	--
2N4238	NPN POWER AMPL	80	60	6.0	100	80	30	150	250	1.0	0.60	1,000	2.0	100	--	--	--
2N4239	NPN POWER AMPL	100	80	6.0	100	100	30	150	250	1.0	0.60	1,000	2.0	100	--	--	--
2N4270	NPN POWER AMPL	200	140	6.0	1.00	150	40	200	10	10	1.00	10	--	5.0	--	--	--
2N4271	NPN AMPL/SWITCH	175	140	6.0	0.50	30	20	140	200	10	0.80	200	20	25	--	--	--
2N4272	NPN AMPL/SWITCH	175	140	6.0	0.10	50	20	140	200	10	0.20	2,000	10	75	--	--	--
2N4300	NPN AMPL/SWITCH	100	80	6.0	10	90	30	120	1.0	2.0	0.30	1.0	30	--	--	--	--
2N4314	PNP AMPL/SWITCH	90	65	7.0	0.25	60	50	250	150	10	1.40	150	60	30	--	--	--
2N4358	PNP HIGH VOLTAGE	240	240	6.0	0.20	200	80	300	10	10	0.50	10	--	--	--	--	--
2N4404	PNP AMPL/SWITCH	80	80	5.0	0.025	60	40	120	150	10	0.50	500	200	10	--	--	--
2N4405	PNP AMPL/SWITCH	80	80	5.0	0.025	60	100	300	150	1.0	0.50	500	200	10	--	--	--
2N4406	PNP AMPL/SWITCH	80	80	5.0	0.025	60	25	100	150	1.0	0.70	1,000	150	15	--	--	--
2N4407	PNP AMPL/SWITCH	80	80	5.0	0.025	60	75	225	150	1.0	0.70	1,000	150	15	--	--	--
2N4427	NPN VHF OSCILLATOR	40	20	3.5	20*	12	10	200	100	5.0	0.50	100	500	4.0	--	--	--
2N4863	NPN AMPL/SWITCH	140	120	6.0	0.10	60	50	150	0.5	5.0	0.20	0.5	50	50	--	--	--
2N4875	NPN AMPL/SWITCH	40	25	--	0.50	15	20	200	50	10	--	--	800	--	--	--	--
2N4876	NPN AMPL/SWITCH	40	30	--	0.50	15	20	200	50	10	--	--	--	--	--	--	--
2N4877	NPN AMPL/SWITCH	70	60	5.0	100	70	20	100	4,000	2.0	1.00	4,000	30	--	--	--	--
2N4890	PNP AMPL/SWITCH	60	40	5.0	0.25***	60	50	250	150	10	1.40	150	100	15	--	--	--
2N4895	NPN AMPL/SWITCH	120	60	6.0	1.00**	60	40	120	2,000	2.0	1.00	5,000	50	80	--	--	--
2N4896	NPN AMPL/SWITCH	120	60	6.0	1.00**	60	100	300	2,000	2.0	1.00	5,000	80	80	--	--	--
2N4897	NPN AMPL/SWITCH	150	80	6.0	1.00**	100	40	120	2,000	2.0	1.00	5,000	50	80	--	--	--
2N4924	NPN AMPL/SWITCH	100	100	5.0	0.10	50	40	200	150	10	0.25	10	100	10	--	--	--
2N4925	NPN HIGH VOLTAGE	150	150	5.0	0.10	75	40	200	150	10	0.25	10	100	10	--	--	--
2N4926	NPN HIGH VOLTAGE	200	200	7.0	0.10	100	20	200	30	10	1.00	10	30	6.0	--	--	--
2N4927	NPN HIGH VOLTAGE	250	250	7.0	0.10	150	20	200	30	10	1.00	10	30	6.0	--	--	--
2N4928	PNP HIGH VOLTAGE	100	100	4.0	0.50	50	25	200	10	10	0.50	10	100	6.0	--	--	--
2N4929	PNP HIGH VOLTAGE	150	150	4.0	0.50	75	25	200	10	10	0.50	10	100	10	--	--	--

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## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2<sup>nd</sup> 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

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### 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).

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