

# 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	*V <sub>CER</sub> MIN	MIN	*I <sub>CEO</sub> **I <sub>CES</sub> ***I <sub>CEV</sub> ****I <sub>CER</sub>		MIN	MAX			MAX		*TYP MIN	*TYP MAX	*TYP MAX	*TYP MAX	*TYP 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	--	--	--

(1-March 2012)

## 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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### CONTACT US

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# Product End of Life Notification

<b>PDN ID:</b>	PDN01239
<b>Notification Date:</b>	7/29/22
<b>Last Buy Date:</b>	1/29/23
<b>Last Shipment Date</b>	7/29/23

Summary: The following NPN high current transistors in the TO-39 package are discontinued now classified as of End of Life (EOL).

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by other manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's ongoing Product Portfolio Management. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

**\* All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.**

<b>Central Part Number</b>	<b>Suggested Replacement</b>
BFX34	N/A
BSX62-10	N/A
BSX63-10	N/A
2N3420	N/A
2N3421	N/A
2N3507	N/A
2N4237	N/A
2N4238	N/A
2N4239	N/A
2N4895	N/A
2N5784	N/A
2N5785	N/A

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. If you would like assistance, please visit <https://my.centralsemi.com/submit-inquiry?type=ER> to submit an online inquiry.

**DISCLAIMER:** This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.