

Small Signal Transistors

TO-92 Case



TYPE NO.	DESCRIPTION	LEAD CODE	V _{CB0}	V _{CEO}	V _{EBO}	I _{CB0} @	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)			(V)	(mA)	(V)	(mA)	(pF)	(MHz)	(dB)	
			MIN	*V _{CES} MIN	MIN	*I _{CES} *I _{CEV} MAX		MIN	*h _{FE} (1kHz) MAX					*C _{rb} MAX	*TYP MIN	MAX	MAX
2N2712	NPN AMPL/SWITCH	ECB	18	18	5.0	500	18	75	250	--	--	--	--	12	--	2.8	--
2N2714	NPN AMPL/SWITCH	ECB	18	18	5.0	100	18	75	250	0.30	50	1.20	50	--	--	--	--
2N2923	NPN LOW NOISE	ECB	25	25	5.0	100	25	90	180*	--	--	--	--	10	160*	--	--
2N2924	NPN LOW NOISE	ECB	25	25	5.0	100	25	150	300*	--	--	--	--	10	160*	--	--
2N2925	NPN LOW NOISE	ECB	25	25	5.0	100	25	235	470*	--	--	--	--	10	160*	2.8	--
2N2926	NPN LOW NOISE	ECB	25	25	5.0	500	18	35	470*	--	--	--	--	10	120*	2.8	--
2N3391A	NPN LOW NOISE	ECB	25	25	5.0	100	25	250	500	4.50	2.0	--	--	10	120*	5.0	--
2N3392	NPN LOW NOISE	ECB	25	25	5.0	100	25	150	300	4.50	2.0	--	--	10	120*	--	--
2N3393	NPN LOW NOISE	ECB	25	25	5.0	100	25	90	180	4.50	2.0	--	--	10	120*	--	--
2N3395	NPN LOW NOISE	ECB	25	25	5.0	100	25	150	500	4.50	2.0	--	--	10	--	--	--
2N3396	NPN LOW NOISE	ECB	25	25	5.0	100	25	90	500	4.50	2.0	--	--	10	--	--	--
2N3397	NPN LOW NOISE	ECB	25	25	5.0	100	25	55	500	4.50	2.0	--	--	10	--	--	--
2N3398	NPN LOW NOISE	ECB	25	25	5.0	100	25	55	800	4.50	2.0	--	--	10	--	--	--
2N3415	NPN LOW NOISE	ECB	25	25	5.0	100	25	180	540	4.50	2.0	0.30	50	--	--	--	--
2N3416	NPN LOW NOISE	ECB	50	50	5.0	100	25	75	225	4.50	2.0	0.30	50	--	--	--	--
2N3417	NPN LOW NOISE	ECB	50	50	5.0	100	50	180	540	4.50	2.0	0.30	50	--	--	--	--
2N3702	PNP AMPL/SWITCH	ECB	40	25	5.0	100	20	60	300	5.0	0.05	0.25	50	12	100	--	--
2N3703	PNP AMPL/SWITCH	ECB	50	30	5.0	100	20	30	150	5.0	50	0.25	50	12	100	--	--
2N3704	NPN AMPL/SWITCH	ECB	50	30	5.0	100	20	100	300	2.0	50	0.60	100	12	100	--	--
2N3705	NPN AMPL/SWITCH	ECB	50	30	5.0	100	20	50	150	2.0	50	0.80	100	12	100	--	--
2N3706	NPN AMPL/SWITCH	ECB	40	20	5.0	100	20	30	600	2.0	50	1.0	100	12	100	--	--
2N3707	NPN LOW NOISE	ECB	30	30	6.0	100	20	100	400	5.0	1.0	1.0	10	--	--	5.0	--
2N3708	NPN LOW NOISE	ECB	30	30	6.0	100	20	45	660	5.0	1.0	1.0	10	--	--	5.0	--
2N3709	NPN LOW NOISE	ECB	30	30	6.0	100	20	45	165	5.0	1.0	1.0	10	--	--	5.0	--
2N3710	NPN LOW NOISE	ECB	30	30	6.0	100	20	90	330	5.0	1.0	1.0	10	--	--	5.0	--
2N3711	NPN LOW NOISE	ECB	30	30	6.0	100	20	180	660	5.0	1.0	1.0	10	--	--	5.0	--
2N3859A	NPN LOW NOISE	ECB	60	60	6.0	50	60	100	200	4.50	2.0	0.125	10	4.0	--	5.0	--
2N3860	NPN LOW NOISE	ECB	30	30	4.0	50	30	150	300	4.50	2.0	0.125	10	4.0	90	--	--
2N3903	NPN AMPL/SWITCH	EBC	60	40	6.0	50*	30	50	150	1.0	10	0.30	50	4.0	250	6.0	225
2N3904	NPN AMPL/SWITCH	EBC	60	40	6.0	50*	30	100	300	1.0	10	0.30	50	4.0	300	5.0	250
2N3905	PNP AMPL/SWITCH	EBC	40	40	5.0	50*	30	50	150	1.0	10	0.40	50	4.5	200	5.0	260
2N3906	PNP AMPL/SWITCH	EBC	40	40	5.0	50*	30	100	300	1.0	10	0.40	50	4.5	250	4.0	300
2N4058	PNP LOW NOISE	ECB	30	30	6.0	100	20	100	400	5.0	0.10	0.70	10	--	--	5.0	--
2N4123	NPN AMPL/SWITCH	EBC	40	30	5.0	50	20	50	150	1.0	2.0	0.30	50	4.0	250	6.0	--
2N4124	NPN AMPL/SWITCH	EBC	30	25	5.0	50	20	120	360	1.0	2.0	0.30	50	4.0	300	5.0	--
2N4125	PNP AMPL/SWITCH	EBC	30	30	4.0	50	20	50	150	1.0	2.0	0.40	50	4.5	200	5.0	--
2N4126	PNP AMPL/SWITCH	EBC	25	25	4.0	50	20	120	360	1.0	2.0	0.40	50	4.5	250	4.0	--
2N4264	NPN SAT SWITCH	EBC	30	15	6.0		12	40	160	1.0	10	0.35	100	4.0	350	--	35
2N4287	NPN LOW NOISE	ECB	45	45	7.0	10	30	150	600	5.0	1.0	0.35	1.0	6.0	40	5.0	--
2N4289	PNP LOW NOISE	ECB	60	45	7.0	10	45	150	600	0.35	1.0	0.80	1.0	8.0	40	4.0	--
2N4400	NPN AMPL/SWITCH	EBC	60	40	6.0	100*	35	50	150	1.0	150	0.75	500	6.5	200	--	255

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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.

(14-May 2015)

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

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Worldwide Distributors:
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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



<https://www.centrasemi.com>

Product End of Life Notification

PDN ID:	PDN01269
Notification Date:	2/04/25
Last Buy Date:	8/04/25
Last Shipment Date	2/04/26

Summary: The following Small Signal transistors are discontinued and now classified as End of Life (EOL).

Although Central Semiconductor 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.**

Central Part Number	Suggested Replacement
BCV72 BK	N/A
BCV72 TR	N/A
BCY58-VII	N/A
BCY59	N/A
BCY59-VII	N/A
BC107A	N/A
BC848A TR	N/A
CMPT930 BK	N/A
CMPT930 TR	N/A
MPS3393	N/A
MPS3707	N/A
MPS3710	N/A
MPS6520	N/A
MPS6520 APM	N/A
MPS6520 TRE	N/A
PE4001	N/A
PE4001-18	N/A
PN3565	N/A
PN3565 APM	N/A
PN3565 TRE	N/A
PN3565-18	N/A
PN930	N/A
2N2923	N/A
2N2923 APM	N/A
2N2923 TRE	N/A
2N2924	N/A
2N2924 APM	N/A
2N2924 TRE	N/A
2N2926	N/A
2N2926 APM	N/A
2N2926 TRE	N/A
2N3392	N/A
2N3392 APM	N/A
2N3392 TRE	N/A
2N3393	N/A
2N3393 APM	N/A

*** CONTINUED ***

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor 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.



<https://www.centrasemi.com>

Product End of Life Notification

PDN ID:	PDN01269
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*** CONTINUED FROM PRIOR PAGE ***

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

Central Part Number	Suggested Replacement
2N3393 TRE	N/A
2N3397	N/A
2N3414	N/A
2N3416	N/A
2N3416 APM	N/A
2N3416 APP	N/A
2N3416 TRA	N/A
2N3416 TRE	N/A
2N3709	N/A
2N5172	N/A
2N5172 APM	N/A
2N5172 TRE	N/A
2N5209	N/A
2N5209 APM	N/A
2N5209 TRE	N/A
2N5961	N/A
2N5961 APM	N/A
2N5961 TRE	N/A
2N930	N/A
2N930A	N/A
2N930B	N/A
2SC1815	N/A
2SC1815 APM	N/A
2SC1815 TRE	N/A
2SC1815-BL	N/A
2SC1815-GR	N/A
2SC1815-O	N/A
2SC1815-Y	N/A
2SC1815-Y APM	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.centrasemi.com/submit-inquiry?type=ER> to submit an online inquiry.

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