Dual Transistors

TO-78 Case

P_D @ T_A=25°C=600mW Total (Both Die Equal Power)



TYPE NO.	DESCRIPTION	I_C (mA)	V_{CBO} (V)	V_{CEO} (V)	h_{FE}		@ I_C (mA)	@ V_{CE} (V)	$V_{CE\ (SAT)}$ (V)	@ I_C (mA)	f_T (MHz) *TYP	MATCHING	
		MAX	MIN	MIN	MIN	MAX					MIN	h_{FE} %	V_{BE} (mV)
2N2060	NPN AMPL/SWITCH	500	100	60	50	150	10	5.0	1.2	50	60	10	5.0
2N2060A	NPN AMPL/SWITCH	500	100	60	50	150	10	5.0	0.6	50	60	10	3.0
2N2223	NPN AMPL/SWITCH	500	100	60	50	200	10	5.0	1.2	50	50	20	15
2N2223A	NPN AMPL/SWITCH	500	100	60	50	200	10	5.0	1.2	50	50	10	5.0
2N2453	NPN LOW NOISE	50	60	30	150	600	1.0	5.0	1.0	5.0	60	10	3.0
2N2453A	NPN LOW NOISE	50	80	50	150	600	1.0	5.0	1.0	5.0	60	10	3.0
2N2480	NPN AMPL/SWITCH	500	75	40	30	350	1.0	5.0	1.3	50	50	20	10
2N2480A	NPN AMPL/SWITCH	500	80	40	50	200	1.0	5.0	1.2	50	50	20	5.0
2N2639	NPN LOW NOISE	30	45	45	50	300	0.01	5.0	1.0	10	40	10	5.0
2N2640	NPN LOW NOISE	30	45	45	50	300	0.01	5.0	1.0	10	40	20	10
2N2641	NPN LOW NOISE	30	45	45	50	300	0.01	5.0	1.0	10	40	- -	- -
2N2642	NPN LOW NOISE	30	45	45	100	300	0.01	5.0	1.0	10	40	10	5.0
2N2643	NPN LOW NOISE	30	45	45	100	300	0.01	5.0	1.0	10	40	20	10
2N2644	NPN LOW NOISE	30	45	45	100	300	0.01	5.0	1.0	10	40	- -	- -
2N2652	NPN AMPL/SWITCH	500	100	60	50	200	1.0	5.0	1.2	50	60	15	3.0
2N2652A	NPN AMPL/SWITCH	500	100	60	50	200	1.0	5.0	1.2	50	60	10	3.0
2N2722	NPN LOW NOISE	40	45	45	50	250	0.001	5.0	1.0	10	100	10	5.0
2N2903	NPN LOW NOISE	50	60	30	125	625	1.0	5.0	1.0	5.0	60	20	10
2N2903A	NPN LOW NOISE	50	60	30	125	625	1.0	5.0	1.0	5.0	60	10	5.0
2N2913	NPN LOW NOISE	30	45	45	60	240	0.01	5.0	0.35	1.0	60	- -	- -
2N2914	NPN LOW NOISE	30	45	45	150	600	0.01	5.0	0.35	1.0	60	- -	- -
2N2915	NPN LOW NOISE	30	45	45	60	240	0.01	5.0	0.35	1.0	60	10	3.0
2N2915A	NPN LOW NOISE	30	45	45	60	240	0.01	5.0	0.35	1.0	60	10	1.5
2N2916	NPN LOW NOISE	30	45	45	150	600	0.01	5.0	0.35	1.0	60	10	3.0
2N2916A	NPN LOW NOISE	30	45	45	150	600	0.01	5.0	0.35	1.0	60	10	1.5
2N2917	NPN LOW NOISE	30	45	45	60	240	0.01	5.0	0.35	1.0	60	20	5.0
2N2918	NPN LOW NOISE	30	45	45	150	600	0.01	5.0	0.35	1.0	60	20	5.0
2N2919	NPN LOW NOISE	30	60	60	60	240	0.01	5.0	0.35	1.0	60	10	3.0
2N2919A	NPN LOW NOISE	30	60	60	60	240	0.01	5.0	0.35	1.0	60	10	1.5
2N2920	NPN LOW NOISE	30	60	60	150	600	0.01	5.0	0.35	1.0	60	10	3.0
2N2920A	NPN LOW NOISE	30	60	60	150	600	0.01	5.0	0.35	1.0	60	10	1.5
2N3726	PNP LOW NOISE	300	45	45	135	350	1.0	5.0	0.25	50	200	10	5.0
2N3727	PNP LOW NOISE	300	45	45	135	350	1.0	5.0	0.25	50	200	10	2.5
2N3806	PNP LOW NOISE	50	60	60	150	450	1.0	5.0	0.2	0.1	100	- -	- -
2N3807	PNP LOW NOISE	50	60	60	300	900	1.0	5.0	0.2	0.1	100	- -	- -
2N3808	PNP LOW NOISE	50	60	60	150	450	1.0	5.0	0.2	0.1	100	20	5.0
2N3809	PNP LOW NOISE	50	60	60	300	900	1.0	5.0	0.2	0.1	100	20	5.0
2N3810	PNP LOW NOISE	50	60	60	150	450	1.0	5.0	0.2	0.1	100	10	3.0
2N3810A	PNP LOW NOISE	50	60	60	150	450	1.0	5.0	0.2	0.1	100	5.0	1.5
2N3811	PNP LOW NOISE	50	60	60	300	900	1.0	5.0	0.2	0.1	100	10	3.0
2N3811A	PNP LOW NOISE	50	60	60	300	900	1.0	5.0	0.2	0.1	100	5.0	1.5
2N4015	PNP AMPL/SWITCH	300	60	60	135	350	1.0	5.0	0.25	50	200	10	5.0
2N4016	PNP AMPL/SWITCH	300	60	60	135	350	1.0	5.0	0.25	50	200	10	2.5
2N5794	NPN AMPL/SWITCH	600	75	40	100	300	150	10	0.3	150	250	- -	- -
2N5796	PNP AMPL/SWITCH	600	60	60	100	300	150	10	0.4	150	200	- -	- -
MD708	NPN SAT SWITCH	200	40	15	40	200	10	1.0	0.5	100	300	- -	- -
MD708A	NPN SAT SWITCH	200	40	15	40	200	10	1.0	0.5	100	300	10	5.0
MD708B	NPN SAT SWITCH	200	40	15	40	200	10	1.0	0.5	100	300	20	10

Central™ Semiconductor Corp.

www.centralsemi.com

(24-February 2014)

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
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- 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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Product End of Life Notification

PDN ID:	PDN01061
Notification Date:	1/17/17
Last Buy Date:	7/17/17
Last Shipment Date	1/17/18

Summary:All transistors manufactured in the TO-78 package are discontinued and now classified as 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 various 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 Product Management Process. Any replacement product will be noted below. The effective date for placing the last purchase order will be six(6) months from the date of this notice and twelve(12) months from the notice date for final shipments; this may be extended if inventory is available.

Central Part Number	Replacement
CEN876	N/A
CEN894	N/A
CEN895	N/A
CEN896	N/A
CEN911	N/A
CEN947	N/A
CEN955 W/DATA	N/A
MD2219A	N/A
MD2369	N/A
MD2369A	N/A
MD2369B	N/A
MD2905	N/A
MD2905A	N/A
MD5179	N/A
MD7000	N/A
MD7001	N/A
MD7003	N/A
MD7003A	N/A
MD7003B	N/A
MD8002	N/A
MD8003	N/A
MD918	N/A
MD918A	N/A
MD918B	N/A
MD984	N/A
2N2060	N/A
2N2060A	N/A
2N2060M	N/A
2N2223	N/A
2N2223A	N/A
2N2453	N/A
2N2453A	N/A
2N2480	N/A
2N2480A	N/A
2N2639	N/A
2N2640	N/A
2N2641	N/A
2N2642	N/A

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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.

Central Semiconductor Corp.

http://www.centralsemi.com

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Central Part Number	Replacement
2N2643	N/A
2N2644	N/A
2N2652	N/A
2N2652A	N/A
2N2720	N/A
2N2721	N/A
2N2722	N/A
2N2903	N/A
2N2903A	N/A
2N2913	N/A
2N2914	N/A
2N2915	N/A
2N2915A	N/A
2N2916	N/A
2N2916A	N/A
2N2917	N/A
2N2918	N/A
2N2919	N/A
2N2919A	N/A
2N2920	N/A
2N2920A	N/A
2N3726	N/A
2N3727	N/A
2N3806	N/A
2N3807	N/A
2N3808	N/A
2N3809	N/A
2N3810	N/A
2N3810A	N/A
2N3811	N/A
2N3811A	N/A
2N4015	N/A
2N4016	N/A
2N4854	N/A
2N4937	N/A
2N4938	N/A
2N4939	N/A
2N5793	N/A
2N5794	N/A
2N5796	N/A
2N5912	N/A
2N6502	N/A

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Central Part Number **Replacement**

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. Please email your requests to engineering@centralsemi.com.

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