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DESCRIPTION:

The CENTRAL SEMICONDUCTOR TIP32 series devices are silicon PNP epitaxial-base power transistors designed for power amplifier and high speed switching applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_C=25°C unless otherwise noted)

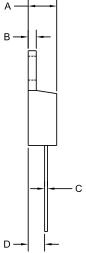
TO-220 CASE

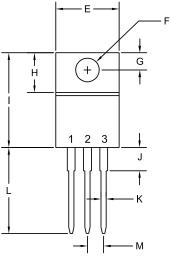
| | ATINGS. (TC-25 C diffess otherwise | SYMBOL | TIP32 | TIP32A | TIP32B | TIP32C | UNITS |
|----------------------|---|------------------|----------|--------|--------|----------|-------|
| Collector-Bas | e Voltage | V _{CBO} | 40 | 60 | 80 | 100 | V |
| Collector-Emi | tter Voltage | VCEO | 40 | 60 | 80 | 100 | V |
| Emitter-Base | Voltage | V _{EBO} | | 5 | .0 | | V |
| Continuous C | ollector Current | IC | | 3 | .0 | | А |
| Peak Collecto | or Current | ICM | | 5 | .0 | | А |
| Continuous B | ase Current | ۱ _B | | 1 | .0 | | А |
| Power Dissipa | ation | PD | | 4 | 0 | | W |
| Power Dissipa | ation (T _A =25°C) | PD | | 2 | .0 | | W |
| Operating and | d Storage Junction Temperature | TJ, Tstg | | -65 to | +150 | | °C |
| Thermal Resi | stance | Θ_{JA} | | 62 | 2.5 | | °C/W |
| Thermal Resi | stance | Θ_{JC} | | 3. | 13 | | °C/W |
| FI ECTRICAI | . CHARACTERISTICS: (T _C =25°C un | less otherwis | e noted) | | | | |
| SYMBOL | TEST CONDITIONS | MIN | , | ТҮР | MAX | (| UNITS |
| ICEO | V _{CE} =30V (TIP32, TIP32A) | | | | 0.3 | | mA |
| ICEO | V _{CE} =60V (TIP32B, TIP32C) | | | | 0.3 | | mA |
| ICES | V _{CE} =Rated V _{CEO} | | | | 0.2 | | mA |
| IEBO | V _{EB} =5.0V | | | | 1.0 | | mA |
| BVCEO | I _C =30mA (TIP32) | 40 | | | | | V |
| BVCEO | I _C =30mA (TIP32A) | 60 | | | | | V |
| BVCEO | I _C =30mA (TIP32B) | 80 | | | | | V |
| BVCEO | I _C =30mA (TIP32C) | 100 | | | | | V |
| V _{CE(SAT)} | I _C =3.0A, I _B =375mA | | | | 1.2 | | V |
| V _{BE(ON)} | V _{CE} =4.0V, I _C =3.0A | | | | 1.8 | | V |
| hFE | V _{CE} =4.0V, I _C =1.0A | 25 | | | | | |
| hFE | V _{CE} =4.0V, I _C =3.0A | 10 | | | 50 | | |
| h _{fe} | V _{CE} =10V, I _C =0.5A, f=1.0kHz | 20 | | | | | |
| fT | V _{CE} =10V, I _C =0.5A, f=1.0MHz | 3.0 | | | | | MHz |
| ton | I _C =1.0A, I _{B1} =I _{B2} =0.1A, R _L =30Ω | | | 0.3 | | | μs |
| ^t off | I _C =1.0A, I _{B1} =I _{B2} =0.1A, R _L =30Ω | | | 1.0 | | | μs |

R1 (12-June 2014)



TO-220 CASE - MECHANICAL OUTLINE Е





LEAD CODE: 1) Base 2) Collector 3) Emitter Tab) Collector

MARKING: FULL PART NUMBER

| DIMENSIONS | | | | |
|------------|--------|-------|-------------|--------|
| | INCHES | | MILLIMETERS | |
| SYMBOL | MIN | MAX | MIN | MAX |
| А | 0.170 | 0.190 | 4.31 | 4.82 |
| В | 0.045 | 0.055 | 1.15 | 1.39 |
| С | 0.013 | 0.026 | 0.33 | 0.65 |
| D | 0.083 | 0.107 | 2.10 | 2.72 |
| E | 0.394 | 0.417 | 10.01 | 10.60 |
| F (DIA) | 0.140 | 0.157 | 3.55 | 4.00 |
| G | 0.100 | 0.118 | 2.54 | 3.00 |
| Н | 0.230 | 0.270 | 5.85 | 6.85 |
| | 0.560 | 0.625 | 14.23 | 15.87 |
| J | - | 0.250 | - | 6.35 |
| K | 0.025 | 0.038 | 0.64 | 0.96 |
| L | 0.500 | 0.579 | 12.70 | 14.70 |
| М | 0.090 | 0.110 | 2.29 | 2.79 |
| | | T |)-220 (R | EV R2) |

TO-220 (REV: R2)

R2

R1 (12-June 2014)

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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

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

· Custom product packing

- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits

Custom bar coding for shipments

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).
- 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.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

Worldwide Distributors: www.centralsemi.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: <u>www.centralsemi.com/terms</u>





Product End of Life Notification

| PDN ID: | PDN01250 |
|--------------------|------------|
| Notification Date: | 2/10/23 |
| Last Buy Date: | |
| Last Shipment Date | Stock Only |

http://www.centralsemi.com

Please be advised that Central Semiconductor must immediately discontinue the product(s) listed in the attached PDN notice. Orders can only be accepted for products with available inventory on hand.

You may have purchased one or more of the products listed. Please do not hesitate to contact your local Central Semiconductor sales representative with any questions or needs you may have. Central regrets any inconvenience this may cause.

Sincerely,

Central Semiconductor Corp.

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.



Product End of Life Notification

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| Notification Date: | 2/10/23 |
| Last Buy Date: | Stock Only |
| Last Shipment Date | Stock Only |

Summary: The following power transistors are discontinued and now classified as of End of Life (EOL). NOTE: If inventory has been depleted, some devices may be available on special order; please contact your Central salesperson, manufacturer's rep, franchised distributor, or inquiry@centralsemi.com.

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.

| BDW51 N/A BDW51A N/A BDW51B N/A BDW51C N/A BDW522 N/A BDW523 N/A BDW524 N/A BDW525 N/A BDW526 N/A BDW527 N/A BDW528 N/A BDW548 N/A BDX54 N/A BDX54 N/A BDX54 N/A BDX54 N/A BDX554 N/A BDX855 N/A BDX855 N/A BDX856 N/A BDX877 N/A BDX878 N/A BDX877 N/A BDX876 N/A BDX877 N/A BD135 N/A BD136-10 SL N/A | Central Part Number | Suggested Replacement |
|--|---------------------|-----------------------|
| BDW51BN/ABDW51CN/ABDW52N/ABDW52AN/ABDW52BN/ABDW52CN/ABDW52CN/ABDX52CN/ABDX54N/ABDX54N/ABDX54N/ABDX54EN/ABDX54CN/ABDX54EN/ABDX55N/ABDX85N/ABDX85AN/ABDX85BN/ABDX87AN/ABDX87CN/ABDX87CN/ABD135N/ABD135.16N/ABD135.16N/ABD136.10N/ABD136.10N/ABD136.10N/ABD136.16N/ABD136.16N/ABD136.16N/ABD136.16N/ABD136.16N/ABD136.16N/ABD136.16N/ABD136.16N/ABD136.16N/ABD136.16N/ABD137N/A | BDW51 | N/A |
| BDW51CN/ABDW52N/ABDW52AN/ABDW52BN/ABDW52CN/ABDW52CN/ABDX50N/ABDX54N/ABDX54N/ABDX54BN/ABDX54EN/ABDX85AN/ABDX85AN/ABDX85AN/ABDX85AN/ABDX85CN/ABDX87AN/ABDX87AN/ABDX87BN/ABD135N/ABD135N/ABD135-16 SLN/ABD136-16 SLN/ABD137N/ABD137N/A | BDW51A | N/A |
| BDW52N/ABDW52AN/ABDW52BN/ABDW52CN/ABDW52CN/ABDX20N/ABDX54N/ABDX54EN/ABDX85AN/ABDX85AN/ABDX85AN/ABDX85AN/ABDX85BN/ABDX85CN/ABDX87AN/ABDX87AN/ABDX87BN/ABDX87BN/ABDX87CN/ABDX87AN/ABDX87BN/ABD135N/ABD135N/ABD135N/ABD135-16 SLN/ABD136-10N/ABD136-16 SLN/ABD136-16 SLN/ABD136-16 SLN/ABD136-16 SLN/ABD136-16 SLN/ABD137N/ABD136-16 SLN/ABD136-16 SLN/ABD136-16 SLN/ABD136-16 SLN/ABD137N/A | BDW51B | N/A |
| BDW52AN/ABDW52BN/ABDW52CN/ABDW94BN/ABDX20N/ABDX54N/ABDX54BN/ABDX54CN/ABDX54EN/ABDX55AN/ABDX85AN/ABDX85AN/ABDX87CN/ABDX87CN/ABDX51CN/ABDX87CN/ABDX87CN/ABD135N/ABD135.16N/ABD136.10N/ABD136.10N/ABD136.16N/ABD137N/ABD137N/A | BDW51C | N/A |
| BDW52BN/ABDW52CN/ABDW94BN/ABDX20N/ABDX54N/ABDX54BN/ABDX54CN/ABDX85N/ABDX85AN/ABDX85BN/ABDX87AN/ABDX87AN/ABDX87AN/ABDX87BN/ABDX87CN/ABDX87CN/ABD135 SLN/ABD135-10 SLN/ABD136-10 SLN/ABD136-16 SLN/ABD137N/ABD137N/ABD136-16 SLN/ABD137N/ABD137N/A | BDW52 | N/A |
| BDW52CN/ABDW94BN/ABDX20N/ABDX54N/ABDX54BN/ABDX54CN/ABDX54EN/ABDX85N/ABDX85AN/ABDX87AN/ABDX87AN/ABDX87AN/ABDX87BN/ABDX87CN/ABDX87CN/ABD135 SLN/ABD135-16 SLN/ABD136-10 SLN/ABD136-16 SLN/ABD137N/A | BDW52A | N/A |
| BDW94B N/A BDX20 N/A BDX54 N/A BDX54B N/A BDX54C N/A BDX54E N/A BDX55 N/A BDX85 N/A BDX85A N/A BDX85A N/A BDX87A N/A BDX87A N/A BDX87B N/A BDX87C N/A BDX87D N/A BD135 N/A BD135 N/A BD135 N/A BD135.10 SL N/A BD136.10 SL N/A BD136.16 SL N/A BD137 | BDW52B | N/A |
| BDX20 N/A BDX54 N/A BDX54B N/A BDX54C N/A BDX54E N/A BDX85 N/A BDX85 N/A BDX85A N/A BDX85B N/A BDX87C N/A BDX87C N/A BDX87C N/A BD135 N/A BD135 N/A BD135 N/A BD135.10 SL N/A BD136.10 SL N/A BD136.10 SL N/A BD136.16 SL N/A BD136.16 SL N/A BD137 N/A | BDW52C | N/A |
| BDX54 N/A BDX54B N/A BDX54C N/A BDX54E N/A BDX85 N/A BDX85A N/A BDX85B N/A BDX87C N/A BDX87C N/A BD135 N/A BD135 N/A BD135 N/A BD135-16 N/A BD136-10 SL N/A BD136-10 SL N/A BD136-16 SL N/A | BDW94B | N/A |
| BDX54B N/A BDX54C N/A BDX54E N/A BDX85 N/A BDX85A N/A BDX85B N/A BDX87C N/A BDX87B N/A BDX87C N/A BD135 N/A BD135 N/A BD135.10 N/A BD135.16 N/A BD136.10 N/A BD136.10 N/A BD136.10 N/A BD136.16 N/A | BDX20 | N/A |
| BDX54C N/A BDX54E N/A BDX85 N/A BDX85A N/A BDX85B N/A BDX85C N/A BDX87 N/A BDX87A N/A BDX87B N/A BDX87C N/A BD135 N/A BD135 N/A BD135.10 N/A BD135.16 N/A BD135.16 N/A BD136.10 N/A BD137 | BDX54 | N/A |
| BDX54E N/A BDX85 N/A BDX85A N/A BDX85B N/A BDX85C N/A BDX87A N/A BDX87A N/A BDX87B N/A BDX87C N/A BD135 N/A BD135 N/A BD135.10 SL N/A BD136-10 N/A BD136-10 N/A BD136-16 SL N/A BD137 N/A | BDX54B | N/A |
| BDX85 N/A BDX85A N/A BDX85B N/A BDX85C N/A BDX87A N/A BDX87A N/A BDX87B N/A BDX87C N/A BD135 N/A BD135 N/A BD135 N/A BD135-16 N/A BD136-10 N/A BD136-10 N/A BD136-16 N/A BD137 N/A | BDX54C | N/A |
| BDX85A N/A BDX85B N/A BDX85C N/A BDX87 N/A BDX87A N/A BDX87B N/A BDX87C N/A BD135 N/A BD135 SL N/A BD135-16 SL N/A BD136-10 SL N/A BD136-10 SL N/A BD136-16 SL N/A BD137 N/A | BDX54E | N/A |
| BDX85B N/A BDX85C N/A BDX87 N/A BDX87A N/A BDX87B N/A BDX87C N/A BD135 N/A BD135 N/A BD135.10 SL N/A BD135.16 SL N/A BD136.10 SL N/A BD136.16 SL N/A BD136.16 SL N/A BD137.10 SL N/A | BDX85 | N/A |
| BDX85C N/A BDX87 N/A BDX87A N/A BDX87B N/A BDX87C N/A BD135 N/A BD135 N/A BD135 SL N/A BD135-10 SL N/A BD135-16 SL N/A BD136-16 SL N/A BD136-10 SL N/A BD136-16 SL N/A BD137 N/A | BDX85A | N/A |
| BDX87 N/A BDX87A N/A BDX87B N/A BDX87C N/A BDY90 N/A BD135 N/A BD135 N/A BD135.10 SL N/A BD135.16 SL N/A BD135.16 SL N/A BD136.10 SL N/A BD136.16 SL N/A BD136.16 SL N/A BD136.16 SL N/A BD137 N/A | BDX85B | N/A |
| BDX87A N/A BDX87B N/A BDX87C N/A BDY90 N/A BD135 N/A BD135 SL N/A BD135-10 SL N/A BD135-16 SL N/A BD136-10 SL N/A BD136-16 SL N/A BD136-16 SL N/A BD137 N/A | BDX85C | N/A |
| BDX87B N/A BDX87C N/A BDY90 N/A BD135 N/A BD135 SL N/A BD135-10 SL N/A BD135-16 N/A BD135-16 SL N/A BD136-10 SL N/A BD136-10 SL N/A BD136-10 SL N/A BD136-16 SL N/A BD137 N/A | BDX87 | N/A |
| BDX87C N/A BDY90 N/A BD135 N/A BD135 SL N/A BD135-10 SL N/A BD135-16 SL N/A BD135-16 SL N/A BD136-10 SL N/A BD136-10 SL N/A BD136-16 SL N/A BD136-16 SL N/A BD136-16 SL N/A BD136-16 SL N/A BD137 N/A | BDX87A | N/A |
| BDY90 N/A BD135 N/A BD135 SL N/A BD135-10 SL N/A BD135-16 N/A BD135-16 SL N/A BD136-10 SL N/A BD136-10 SL N/A BD136-10 SL N/A BD136-16 SL N/A BD136-16 SL N/A BD136-16 SL N/A BD137 N/A | BDX87B | N/A |
| BD135 N/A BD135 SL N/A BD135-10 SL N/A BD135-16 N/A BD135-16 SL N/A BD136 N/A BD136-10 SL N/A BD136-10 SL N/A BD136-16 SL N/A BD136-16 SL N/A BD136-16 SL N/A BD137 N/A | BDX87C | N/A |
| BD135 SL N/A BD135-10 SL N/A BD135-16 N/A BD135-16 SL N/A BD136 N/A BD136-10 N/A BD136-16 SL N/A BD136-16 SL N/A BD136-16 SL N/A BD136-16 SL N/A BD137 N/A | BDY90 | N/A |
| BD135-10 SL N/A BD135-16 N/A BD135-16 SL N/A BD136 N/A BD136-10 N/A BD136-16 SL N/A BD136-16 SL N/A BD136-16 SL N/A BD136-16 SL N/A BD137 N/A | BD135 | N/A |
| BD135-16 N/A BD135-16 SL N/A BD136 N/A BD136-10 N/A BD136-16 SL N/A BD136-16 SL N/A BD137 N/A | BD135 SL | N/A |
| BD135-16 SL N/A BD136 N/A BD136-10 N/A BD136-10 SL N/A BD136-16 SL N/A BD136-16 SL N/A BD137 N/A | BD135-10 SL | N/A |
| BD136 N/A BD136-10 N/A BD136-10 SL N/A BD136-16 N/A BD136-16 SL N/A BD137 N/A | BD135-16 | N/A |
| BD136-10 N/A BD136-10 SL N/A BD136-16 N/A BD136-16 SL N/A BD137 N/A | BD135-16 SL | N/A |
| BD136-10 SL N/A BD136-16 N/A BD136-16 SL N/A BD137 N/A | BD136 | N/A |
| BD136-16 N/A BD136-16 SL N/A BD137 N/A | BD136-10 | N/A |
| BD136-16 SL N/A BD137 N/A | BD136-10 SL | N/A |
| BD137 N/A | BD136-16 | N/A |
| | BD136-16 SL | N/A |
| ** CONTINUED *** | BD137 | N/A |
| | *** CONTINUED *** | |

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Product End of Life Notification

| PDN ID: | PDN01250 |
|--------------------|------------|
| Notification Date: | 2/10/23 |
| Last Buy Date: | |
| Last Shipment Date | Stock Only |

*** CONTINUED FROM PRIOR PAGE ***

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

| Central Part Number | Suggested Replacement |
|---------------------|-----------------------|
| BD137-10 | N/A |
| BD137-10 SL | N/A |
| BD137-16 | N/A |
| BD138 | N/A |
| BD138-10 | N/A |
| BD138-10 SL | N/A |
| BD138-16 | N/A |
| BD138-16 SL | N/A |
| BD139 | N/A |
| BD139-10 | N/A |
| BD139-10 SL | N/A |
| BD139-16 | N/A |
| BD139-16 SL | N/A |
| BD140 | N/A |
| BD140-10 | N/A |
| BD140-10 SL | N/A |
| BD140-16 | N/A |
| BD140-16 SL | N/A |
| BD157 | N/A |
| BD158 | N/A |
| BD159 | N/A |
| BD175 | N/A |
| BD176 | N/A |
| BD177 | N/A |
| BD178 | N/A |
| BD179 | N/A |
| BD180 | N/A |
| BD201 | N/A |
| BD204 | N/A |
| BD233 | N/A |
| BD234 | N/A |
| BD235 | N/A |
| BD236 | N/A |
| BD237 | N/A |
| BD238 | N/A |
| BD238 SL | N/A |
| BD433 | N/A |
| BD433 | N/A |
| BD437 | N/A |
| BD438 | N/A |
| BD439 | N/A |
| BD439 BD440 | N/A N/A |
| BD440 BD441 | N/A N/A |
| | |

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| Central Part Number | Suggested Replacement |
|---------------------|-----------------------|
| BD442 | N/A |
| BD537 | N/A |
| BD538 | N/A |
| BD675 | N/A |
| BD675A | N/A |
| BD676 | N/A |
| BD676A | N/A |
| BD676A SL | N/A |
| BD677 | N/A |
| BD677A | N/A |
| BD678 | N/A |
| BD678A | N/A |
| BD679 | N/A |
| BD679A | N/A |
| BD679A SL | N/A |
| BD680 | N/A |
| BD680A | N/A |
| BD680A SL | N/A |
| BD681 | N/A |
| BD681 SL | N/A |
| BD682 | N/A |
| BD682 SL | N/A |
| BD683 | N/A |
| BD683 SL | N/A |
| BD908 | N/A |
| BF457 | N/A |
| BF458 | N/A |
| BF459 | N/A |
| BF459 SL | N/A |
| BF469 | N/A |
| BF471 | N/A |
| BF472 | N/A |
| BUW34 | N/A |
| BUW35 | N/A |
| BUW36 | N/A |
| BUW44 | N/A |
| BUW45 | N/A |
| BUW46 | N/A |
| BUX43 | N/A |
| BUX44 | N/A N/A |
| BUX47 | N/A |
| BUX48 | N/A N/A |
| BUX80 | N/A N/A |
| DUMOU | 1 1/ 4 2 |

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| Central Part Number | Suggested Replacement |
|---------------------|-----------------------|
| BUY69A | N/A |
| BUY69B | N/A |
| BUY69C | N/A |
| BU408 | N/A |
| BU409 | N/A |
| CEN1025 | N/A |
| CEN1037 | N/A |
| CEN1063 | N/A |
| CEN1092 | N/A |
| CEN1102 | N/A |
| CEN1111 | N/A |
| CEN1177 | N/A |
| CEN1247 | N/A |
| CEN1306 | N/A |
| CEN1323 | N/A |
| CEN1328 | N/A |
| CEN1364 SL | N/A |
| CEN1378 SL | N/A |
| CEN1391 | N/A |
| CEN1396 | N/A |
| CEN1406 | N/A |
| CEN1416 | N/A |
| CEN1439 | N/A |
| CEN1450 | N/A |
| CEN496 | N/A |
| CEN537 | N/A |
| CEN591 | N/A |
| CEN596 | N/A |
| CEN644 | N/A |
| CEN671 | N/A |
| CEN698-1 | N/A |
| CEN698-2 | N/A |
| CEN774 | N/A |
| CEN821 | N/A |
| CEN844 | N/A |
| CEN925 | N/A |
| CEN951 | N/A |
| CEN961 | N/A |
| CEN972 | N/A |
| CEN992 | N/A |
| CM3441 | N/A |
| CP166-BUP54-WN | N/A |
| CP230-CZT122-CT | CP260-TIP122-CT |
| *** CONTINUED *** | |
| CONTRICTED | |

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

| Central Part Number | Suggested Replacement |
|---------------------|-----------------------|
| CP230-HTIP122-CM | N/A |
| CP230-H2N6039-CM | N/A |
| CP230-TIP122-CM | CP260-TIP122-CM |
| CP230-TIP122-CT | CP260-TIP122-CT |
| CP230-TIP122-CT20 | N/A |
| CP230-2N6039-CM | N/A |
| CP230-2N6039-CT | N/A |
| CP230-2N6039-WN | N/A |
| CP630-CEN1263-WN | CP660-TIP127-WN |
| CP630-CZT127-CT | CP660-TIP127-CT |
| CP630-HTIP127-CM | N/A |
| CP630-TIP127-CT | CP660-TIP127-CT |
| CP630-TIP127-WN | CP660-TIP127-WN |
| CP630-2N6036-CT | N/A |
| CZT122 BK | N/A |
| CZT122 TR | N/A |
| CZT127 BK | N/A |
| CZT127 TR | N/A |
| CZT31C BK | N/A |
| CZT31C TR | N/A |
| D44C12 | N/A |
| D44E1 | N/A |
| D44E3 | N/A |
| D45E3 | N/A |
| D45H8 | N/A |
| MJE13003 | N/A |
| MJE13003 SL | N/A |
| MJE13005 | N/A |
| MJE13005 SL | N/A |
| MJE13006 | N/A |
| MJE13008 | N/A |
| MJE13009 | N/A |
| MJE15030 | N/A |
| MJE15031 | N/A |
| MJE170 | N/A |
| MJE171 | N/A |
| MJE172 | N/A |
| MJE180 | N/A |
| MJE181 | N/A |
| MJE182 | N/A |
| MJE200 | N/A |
| MJE210 | N/A |
| MJE220 | N/A |
| *** CONTINUED *** | |
| | |

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| Central Part Number | Suggested Replacement |
|---------------------|-----------------------|
| MJE221 | N/A |
| MJE222 | N/A |
| MJE223 | N/A |
| MJE224 | N/A |
| MJE225 | N/A |
| MJE230 | N/A |
| MJE231 | N/A |
| MJE232 | N/A |
| MJE233 | N/A |
| MJE234 | N/A |
| MJE235 | N/A |
| MJE2360T | N/A |
| MJE240 | N/A |
| MJE241 | N/A |
| MJE242 | N/A |
| MJE243 | N/A |
| MJE244 | N/A |
| MJE250 | N/A |
| MJE251 | N/A |
| MJE252 | N/A |
| MJE253 | N/A |
| MJE254 | N/A |
| MJE2801T | N/A |
| MJE2901T | N/A |
| MJE2955T | N/A |
| MJE340 | N/A |
| MJE341 | N/A |
| MJE344 | N/A |
| MJE344 SL | N/A |
| MJE3440 | N/A |
| MJE350 | N/A |
| MJE370 | N/A |
| MJE371 | N/A |
| MJE520 | N/A |
| MJE521 | N/A |
| MJE700 | N/A |
| MJE701 | N/A |
| MJE702 | N/A |
| MJE703 | N/A |
| MJE710 | N/A |
| MJE711 | N/A |
| MJE712 | N/A |
| MJE720 | N/A |
| ** CONTINUED *** | |

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| Central Part Number | Suggested Replacement |
|---------------------|-----------------------|
| MJE721 | N/A |
| MJE722 | N/A |
| MJE800 | N/A |
| MJE800T | N/A |
| MJE801 | N/A |
| MJE801T | N/A |
| MJE802 | N/A |
| MJE802T | N/A |
| MJE803 | N/A |
| MJE803T | N/A |
| MJ1000 | N/A |
| MJ1001 | N/A |
| MJ10012 | N/A |
| MJ11011 | N/A |
| MJ11012 | N/A |
| MJ11013 | N/A |
| MJ11014 | N/A |
| MJ11015 | N/A |
| MJ11016 | N/A |
| MJ2501 | N/A |
| MJ2955 | N/A |
| MJ3000 | N/A |
| MJ3001 | N/A |
| MJ4033 | N/A |
| MJ4035 | N/A |
| MJ410 | N/A |
| MJ802 | N/A |
| MJ901 | N/A |
| PMD10K100 | N/A |
| PMD10K40 | N/A |
| PMD10K60 | N/A |
| PMD10K80 | N/A |
| PMD12K100 | N/A |
| PMD12K40 | N/A |
| PMD12K60 | N/A |
| PMD12K80 | N/A |
| PMD13K100 | N/A |
| PMD16K100 | N/A |
| PMD16K60 | N/A |
| PMD16K80 | N/A |
| PMD1601K | N/A |
| PMD1602K | N/A |
| PMD1603K | N/A |
| ** CONTINUED *** | |

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| Central Part Number | Suggested Replacement |
|---------------------|-----------------------|
| PMD17K100 | N/A |
| PMD17K60 | N/A |
| PMD17K80 | N/A |
| PMD1701K | N/A |
| PMD1702K | N/A |
| PMD1703K | N/A |
| PMD18K100 | N/A |
| PMD18K60 | N/A |
| PMD18K80 | N/A |
| PMD19K100 | N/A |
| PMD19K60 | N/A |
| PMD19K80 | N/A |
| SE9303 | N/A |
| SE9304 | N/A |
| SE9305 | N/A |
| TIP102 | N/A |
| TIP107 | N/A |
| TIP107 SL | N/A |
| TIP117 | N/A |
| TIP117 SL | N/A |
| TIP122 | N/A |
| TIP122 SL | N/A |
| TIP127 | N/A |
| TIP127 SL | N/A |
| TIP132 | N/A |
| TIP137 | N/A |
| TIP140T | N/A |
| TIP141T | N/A |
| TIP142T | N/A |
| TIP145T | N/A |
| TIP146T | N/A |
| TIP147T | N/A |
| TIP29 | N/A |
| TIP29A | N/A |
| TIP29A SL | N/A |
| TIP29B | N/A |
| TIP29C | N/A |
| TIP31 | N/A |
| TIP31 SL | N/A |
| TIP31A | N/A |
| TIP31B | N/A |
| TIP31C SL | N/A |
| TIP32 | N/A |
| ** CONTINUED *** | |

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

| Central Part Number | Suggested Replacement |
|---------------------|-----------------------|
| TIP32A | N/A |
| TIP32A SL | N/A |
| TIP32B | N/A |
| TIP32C | N/A |
| TIP41 | N/A |
| TIP41A | N/A |
| TIP41B | N/A |
| TIP41C | N/A |
| TIP41C SL | N/A |
| TIP42 | N/A |
| TIP42A | N/A |
| TIP42B | N/A |
| TIP42C | N/A |
| TIP42C SL | N/A |
| TIP42D | N/A |
| 2N3054 | N/A |
| 2N3055 | N/A |
| 2N3442 | N/A |
| 2N3448 | N/A |
| 2N3713 | N/A |
| 2N3714 | N/A |
| 2N3715 | N/A |
| 2N3716 | N/A |
| 2N3766 | N/A |
| 2N3767 | N/A |
| 2N3771 | N/A |
| 2N3772 | N/A |
| 2N3773 | N/A |
| 2N3789 | N/A |
| 2N3790 | N/A |
| 2N3791 | N/A |
| 2N3792 | N/A |
| 2N3902 | N/A |
| 2N4231 | N/A |
| 2N4232 | N/A |
| 2N4233 | N/A |
| 2N4347 | N/A |
| 2N4348 | N/A |
| 2N4398 | N/A |
| 2N4399 | N/A |
| 2N4901 | N/A |
| 2N4902 | N/A |
| 2N4903 | N/A |
| ** CONTINUED *** | |

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

| Central Part Number | Suggested Replacement |
|---------------------|-----------------------|
| 2N4904 | N/A |
| 2N4905 | N/A |
| 2N4906 | N/A |
| 2N4910 | N/A |
| 2N4911 | N/A |
| 2N4912 | N/A |
| 2N4913 | N/A |
| 2N4914 | N/A |
| 2N4915 | N/A |
| 2N4918 | N/A |
| 2N4919 | N/A |
| 2N4920 | N/A |
| 2N4921 | N/A |
| 2N4922 | N/A |
| 2N4923 | N/A |
| 2N4923 SL | N/A |
| 2N5067 | N/A |
| 2N5068 | N/A |
| 2N5069 | N/A |
| 2N5192 | N/A |
| 2N5192 SL | N/A |
| 2N5192 5E | N/A |
| 2N5195 SL | N/A |
| 2N5240 | N/A |
| 2N5294 | N/A |
| 2N5296 | N/A |
| 2N5290 2N5297 | N/A N/A |
| 2N5297 SL | N/A N/A |
| 2N5297 SE 2N5298 | N/A N/A |
| 2N5298 2N5301 | N/A N/A |
| 2N5301 2N5302 | N/A N/A |
| 2N5302 2N5303 | N/A N/A |
| 2N5490 | N/A N/A |
| 2N5492 | N/A N/A |
| 2N5494 | N/A N/A |
| 2N5496 | N/A N/A |
| 2N5629 | N/A N/A |
| 2N5632 | N/A N/A |
| 2N5655 | N/A N/A |
| 2N5656 | N/A N/A |
| 2N5657 | N/A N/A |
| 2N5057 2N5745 | N/A N/A |
| 41NJ/4J | |
| 2N5760 | N/A |

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

| N5838 N/A N5873 N/A N5875 N/A N5876 N/A N5877 N/A | |
|---|--|
| N5875 N/A N5876 N/A N5877 N/A | |
| N5876 N/A N5877 N/A | |
| N5877 N/A | |
| | |
| | |
| N5878 N/A | |
| N5879 N/A | |
| N5880 N/A | |
| N5881 N/A | |
| N5882 N/A | |
| N5883 N/A | |
| N5884 N/A | |
| N5885 N/A | |
| N5886 N/A | |
| N6029 N/A | |
| N6031 N/A | |
| N6034 N/A | |
| N6035 N/A | |
| N6036 N/A | |
| N6037 N/A | |
| N6038 N/A | |
| N6039 SL N/A | |
| N6040 N/A | |
| N6042 N/A | |
| N6043 N/A | |
| N6044 N/A | |
| N6045 N/A | |
| N6050 N/A | |
| N6051 N/A | |
| N6052 N/A | |
| N6055 N/A | |
| N6055 N/A | |
| N6057 N/A | |
| N6058 N/A | |
| N6059 N/A | |
| N6099 N/A | |
| N6107 N/A | |
| N6109 N/A | |
| N6111 N/A | |
| N6121 N/A | |
| N6122 N/A | |
| N6122 N/A N6123 N/A | |
| N6123 N/A N6124 N/A | |
| CONTINUED *** | |

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| | Suggested Replacement |
|------------------|-----------------------|
| 2N6125 | N/A |
| 2N6126 | N/A |
| 2N6129 | N/A |
| 2N6130 | N/A |
| 2N6131 | N/A |
| 2N6132 | N/A |
| 2N6133 | N/A |
| 2N6134 | N/A |
| 2N6226 | N/A |
| 2N6229 | N/A |
| 2N6230 | N/A |
| 2N6246 | N/A |
| 2N6247 | N/A |
| 2N6248 | N/A |
| 2N6249 | N/A |
| 2N6250 | N/A |
| 2N6251 | N/A |
| 2N6253 | N/A |
| 2N6254 | N/A |
| 2N6259 | N/A |
| 2N6260 | N/A |
| 2N6263 | N/A |
| 2N6282 | N/A N/A |
| 2N6283 | N/A |
| 2N6284 | N/A N/A |
| 2N6285 | N/A N/A |
| 2N6286 | N/A N/A |
| 2N6287 | N/A N/A |
| 2N6288 | N/A N/A |
| 2N6290 | N/A N/A |
| 2N6292 | N/A N/A |
| 2N6306 | N/A N/A |
| 2N6307 | N/A N/A |
| 2N6308 | N/A N/A |
| 2N6312 | N/A N/A |
| 2N6371 | N/A N/A |
| 2N6383 | N/A N/A |
| 2N6384 | N/A N/A |
| 2N6385 | N/A N/A |
| 2N6386 | N/A N/A |
| 2N6387 | N/A N/A |
| 2N6387 2N6388 | |
| 2N6388 2N6465 | N/A N/A |
| 21N040J | N/A |

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| Central Part Number | Suggested Replacement |
|---------------------|-----------------------|
| 2N6466 | N/A |
| 2N6469 | N/A |
| 2N6470 | N/A |
| 2N6471 | N/A |
| 2N6472 | N/A |
| 2N6475 | N/A |
| 2N6476 | N/A |
| 2N6489 | N/A |
| 2N6489 SL | N/A |
| 2N6490 | N/A |
| 2N6491 | N/A |
| 2N6497 | N/A |
| 2N6498 | N/A |
| 2N6498 SL | N/A |
| 2N6499 | N/A |
| 2N6499 SL | N/A |
| 2N6530 | N/A |
| 2N6531 | N/A |
| 2N6532 | N/A |
| 2N6543 | N/A |
| 2N6544 | N/A |
| 2N6545 | N/A |
| 2N6546 | N/A |
| 2N6547 | N/A |
| 2N6569 | N/A |
| 2N6576 | N/A |
| 2N6577 | N/A |
| 2N6578 | N/A |
| 2N6594 | N/A |
| 2N6609 | N/A |
| 2N6666 | N/A |
| 2N6667 | N/A |
| 2N6668 | N/A |
| 2N6671 | N/A |
| 2N6672 | N/A |
| 2N6673 | N/A |
| 2N6674 | N/A |
| 2N6675 | N/A |
| 2N6677 | N/A |
| 2N6678 | N/A |
| 40250 | N/A |
| 40312 | N/A |

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Central Part Number Suggested 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. If you would like assistance, please visit https://my.centralsemi.com/submit-inquiry?type=ER to submit an online inquiry.

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Mouser Electronics

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TIP32C TIP32A SL TIP32A SL TIN/LEAD TIP32B TIN/LEAD TIP32C TIN/LEAD TIP32A TIN/LEAD