

Selection guide

Power Bipolar Transistors

1998 Dec 16

HORIZONTAL DEFLECTION TRANSISTORS

| V_{CESM} (V) | I_C (DC) (A) | I_C sat. (A) | t_f max. (μ s) | LEADED PACKAGES | | | | | | | | TYPICAL APPLICATIONS | |
|-------------------|----------------------|----------------------|-----------------------------|-----------------|--------------------|-------------------|----------------------------------|----------------------|----------------------|----------------------|-------------------|-------------------------|--------------|
| | | | | SOT82 | SOT78 (TO220AB) | SOT186 | SOT186A (isolated TO220AB) | SOT199 | SOT399 (TOP3D) | SOT429 (TO247) | SOT430 (TOP3L) | | |
| 1500 | 2.5 | 2 | 0.9 | | BU505 BU505D | BU505F BU505DF | | | | | | | TV1/TV2 |
| 1500 | 5 | 3 | 0.5 | | | | BU1506DX | BU2506DF | BU2506DX | | | | TV2 |
| 1500 | 5 | 3 | 0.7 | | BU506 BU506D | BU506F BU506DF | | | | | | | TV1/TV2 |
| 1500 | 8 | 4 | 0.5 | | | | BU1507AX BU1507DX | BU2507AF BU2507DF | BU2507AX BU2507DX | | | | TV2 |
| 1500 | 8 | 4.5 | 0.6 | | | | BU1508AX BU1508DX | BU2508AF BU2508DF | BU2508AX BU2508DX | BU2508AW BU2508DW | | | TV2/Monitor1 |
| 1500 | 8 | 4.5 | 1 | | | | | BU508AF BU508DF | BU508AX BU508DX | BU508AW BU508DW | | | TV2 |
| 1500 | 9 | 4.5 | 0.4 | | | | | BU2515AF BU2515DF | BU2515AX BU2515DX | | | | TV2/Monitor3 |
| 1500 | 10 | 6 | 0.25 | | | | | BU2522AF BU2522DF | BU2522AX BU2522DX | BU2522AW | | | TV2/Monitor4 |
| 1500 | 10 | 6 | 0.5 | | | | | BU2520AF BU2520DF | BU2520AX BU2520DX | BU2520AW BU2520DW | | | TV2/Monitor3 |
| 1500 | 11 | 5.5 | 0.3 | | | | | BU2523AF BU2523DF | BU2523AX BU2523DX | | | | TV2/Monitor5 |
| 1500 | 12 | 6 | 0.2 | | | | | BU2527AF BU2527DF | BU2527AX BU2527DX | BU2527AW BU2527DW | | | Monitor6 |
| 1500 | 12 | 8 | 0.35 | | | | | BU2525AF BU2525DF | BU2525AX BU2525DX | BU2525AW BU2525DW | | | TV2/Monitor5 |
| 1500 | 16 | 7 | 0.1 | | | | | | | BU2532AW | BU2532AL | | TV3/Monitor6 |
| 1500 | 16 | 9 | 0.25 | | | | | | | BU2530AW | BU2530AL | | TV3/Monitor6 |
| 1700 | 8 | 4 | 0.52 | | | | | BU2708AF BU2708DF | BU2708AX BU2708DX | | | | TV2 |
| 1700 | 10 | 4.5 | 0.25 | | | | | BU2722AF | BU2722AX | | | | TV2 |

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| V_{CESM} (V) | I_C (DC) (A) | I_C sat. (A) | t_f max. (μ s) | LEADED PACKAGES | | | | | | | | TYPICAL APPLICATIONS |
|-------------------|----------------------|----------------------|-----------------------------|-----------------|--------------------|--------|----------------------------------|----------------------|----------------------|-------------------|-------------------|-------------------------|
| | | | | SOT82 | SOT78 (TO220AB) | SOT186 | SOT186A (isolated TO220AB) | SOT199 | SOT399 (TOP3D) | SOT429 (TO247) | SOT430 (TOP3L) | |
| 1700 | 10 | 5.5 | 0.9 | | | | | BU2720AF BU2720DF | BU2720AX BU2720DX | | | TV2 |
| 1700 | 12 | 5 | 0.25 | | | | | BU2727AF | BU2727AX | BU2727AW | | Monitor4 |
| 1700 | 12 | 7 | 0.8 | | | | | BU2725AF BU2725DF | BU2725AX BU2725DX | | | TV2 |

NEW RANGE OF BU45XX HORIZONTAL DEFLECTION TRANSISTORS

| V_{CESM} (V) | I_C (DC) (A) | I_C sat. (A) | t_f max. (μ s) | LEADED PACKAGES | | | | | | | | TYPICAL APPLICATIONS |
|-------------------|----------------------|----------------------|-----------------------------|-----------------|--------------------|--------|----------------------------------|----------|-------------------|-------------------|-------------------|-------------------------|
| | | | | SOT82 | SOT78 (TO220AB) | SOT186 | SOT186A (isolated TO220AB) | SOT199 | SOT399 (TOP3D) | SOT429 (TO247) | SOT430 (TOP3L) | |
| 1500 | 5 | 3 | 0.5 | | | | BU4506AZ | BU4506AF | BU4506AX | | | TV2 |
| 1500 | 8 | 4 | 0.45 | | | | BU4507AZ | BU4507AF | BU4507AX | | | TV2/Monitor1 |
| 1500 | 8 | 5 | 0.48 | | | | BU4508AZ | BU4508AF | BU4508AX | | | TV2/Monitor1 |
| 1500 | 9 | 6 | 0.5 | | | | | BU4515AF | BU4515AX | | | TV2/Monitor2 |
| 1500 | 10 | 7 | 0.4 | | | | | BU4522AF | BU4522AX | | | TV2/Monitor3 |
| 1500 | 11 | 8 | 0.4 | | | | | BU4523AF | BU4523AX | BU4523AW | | TV2/Monitor5 |
| 1500 | 12 | 9 | 0.55 | | | | | BU4525AF | BU4525AX | | | TV2 |
| 1500 | 14 | 9 | 0.55 | | | | | | | BU4525AW | BU4525AL | Monitor5 |
| 1500 | 16 | 10 | 0.4 | | | | | | | BU4530AW | BU4530AL | TV3/Monitor6 |
| 1500 | 20 | 8 | 0.1 | | | | | | | BU4540AW | BU4540AL | TV3/Monitor7 |
| 1500 | 25 | 8 | 0.1 | | | | | | | | BU4550AL | TV3/Monitor7 |

LIGHTING TRANSISTORS

| V_{CESM} (V) | I_C (DC) (A) | I_C sat. (A) | t_f max. (μ s) | LEADED PACKAGES | | | | | | | | SURFACE MOUNT | TYPICAL APPS. | |
|-------------------|----------------------|----------------------|-----------------------------|-----------------|--------------------|---------|----------------------------------|---------|-------------------|-------------------|-------------------|---------------------------------|------------------|-------|
| | | | | SOT82 | SOT78 (TO220AB) | SOT186 | SOT186A (isolated TO220AB) | SOT199 | SOT399 (TOP3D) | SOT429 (TO247) | SOT430 (TOP3L) | SOT404 (D ² -PAK) | | |
| 700 | 1 | 0.5 | 0.15 | | BUJ101A | | BUJ101AX | | | | | | | L1/L2 |
| 700 | 4 | 2 | 0.15 | | BUJ103A | | BUJ103AX | | | | | | | L1/L2 |
| 700 | 4 | 2 | 0.2 | | PHE13005 | | | | | | | | | L1/L2 |
| 700 | 6 | 4 | 0.2 | | BUJ105A | | BUJ105AX | | | | | | | L1 |
| 700 | 8 | 6 | 0.2 | | BUJ106A | | BUJ106AX | | | | | | | L1 |
| 800 | 0.5 | – | 0.28 | BUX86P | | | | | | | | | | L1 |
| 850 | 2 | 1 | 0.2 | | BUJ202A | | BUJ202AX | | | | | | | L1 |
| 800 | 2 | 1 | 0.4 | | BUX84 | | | | | | | | | L1 |
| 850 | 4 | 2 | 0.15 | | BUJ204A | | BUJ204AX | | | | | | | L1 |
| 850 | 5 | 3 | 0.1 | | BUT211 | | | | | | | | | L1 |
| 850 | 5 | 3 | 0.8 | | BUT11 | BUT11F | | | | | | | | L1 |
| 850 | 6 | 4 | 0.2 | | BUJ205A | | BUJ205AX | | | | | | | L1 |
| 850 | 8 | 6 | 0.8 | | | BUT12F | | | | | | | | L1 |
| 850 | 15 | 10 | 0.8 | | | | | BUW13F | | | | | | L1 |
| 1000 | 0.5 | – | 0.28 | BUX87P | | | | | | | | | | L1 |
| 1000 | 0.5 | 0.2 | 0.16 | | BUJ301A | | BUJ301AX | | | | | | | L1 |
| 1000 | 2 | 1 | 0.4 | BUW85 | BUX85 | BUX85F | | | | | | | | L1 |
| 1000 | 5 | 2.5 | 0.15 | | BUT11A1 | | BUT11AX | | | | | | | L1 |
| 1000 | 5 | 2.5 | 0.8 | | BUT11A | BUT11AF | | BUW11AF | | | | | | L1 |
| 1000 | 5 | 3 | 0.15 | | BUJ303A | | BUJ303AX | | | | | | | L1 |
| 1000 | 5 | 3.5 | 0.16 | | | | BUT11APX | | | | | | | TV2 |
| 1000 | 6 | 4 | 0.2 | | BUJ304A | | BUJ304AX | | | | | | | L1 |
| 1000 | 6 | 4 | 0.8 | | BUT18A | BUT18AF | | | | | | | | L1 |
| 1000 | 8 | 5 | 0.3 | | BUT12AI | | | | | | | | | L1 |
| 1000 | 8 | 5 | 0.8 | | BUT12A | BUT12AF | | | | | | | | L1 |
| 1200 | 6 | 3 | 0.3 | | BUJ403A | | BUJ403AX | | | | | | | L1 |
| 1750 | 5 | 1.5 | 0.6 | | BU1706A | | BU1706AX | | | | | BU1706AB | | L1 |

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Key to Typical Applications column⁽¹⁾

| | | | |
|----------|--------------------------------|----------|-------------------|
| TV1 | monochrome TV | Monitor2 | 14" - 15" monitor |
| TV2 | colour TV | Monitor3 | 15" monitor |
| TV3 | high definition TV (HDTV) | Monitor4 | 15" - 17" monitor |
| L1 | HF electronic ballast | Monitor5 | 17" monitor |
| L2 | compact fluorescent lamp (CFL) | Monitor6 | 17" - 19" monitor |
| Monitor1 | 14" monitor | Monitor7 | 19" - 21" monitor |

1. Many of these products can also be used for other applications.