

Power Devices

HIGH SPEED, HIGH VOLTAGE DARLINGTONS (in order of current rating)

TYPE NO.	PACKAGE OUTLINE	$I_{C(DC)}^{(1)}$	V_{CBO}	V_{CEO}	$V_{CE(sat)}$ MAX. at I_C	t_f MAX at I_C
BU826 BU826A	SOT-93	6A	800V 900V	375V 400V	2V at 2.5A	0.6 μ s at 2.5A ($T_{mb} = 100^\circ\text{C}$)
BUV90	SOT-93	12A	650V	400V	1.5V at 5A	—
BUV90F	SOT-199	12A	650V	400V	1.5V at 5A	—
ESM3045AV ESM3045DV	SOT-227B2	24A	1000V 600V	450V	2V at 15A	*0.5 μ s at 15A *0.4 μ s at 15A
ESM4045AV ESM4045DV	SOT-227B2	42A	1000V 600V	450V	2V at 25A	*0.6 μ s at 25A *0.5 μ s at 25A
ESM5045DV	SOT-227B2	60A	600V	450V	2V at 35A	*0.5 μ s at 35A
ESM6045AV ESM6045DV	SOT-227B2	84A	1000V 600V	450V	2V at 50A	*0.6 μ s at 50A *0.5 μ s at 50A

(1) T_{mb} = max. rated.* Typical values at $T_{mb} = 100^\circ\text{C}$.

D indicates integral diode.

HIGH SPEED, HIGH VOLTAGE TRANSISTORS (in order of current rating)

TYPE NO.	PACKAGE OUTLINE	$I_{C(DC)}^{(1)}$	V_{CES}	V_{CEO}	$V_{CE(sat)}$ MAX. at I_C/I_B	$t_{f,typ}$ at I_C (INDUCTIVE LOAD)
BUX86 BUX87	TO-126	0.5A	800V 1000V	400V 450V	1.5V at 0.1A	0.4 μ s at 0.2A
TIP47 TIP48 TIP49 TIP50	TO-220AB	1.0A	350V 400V 450V 500V	250V 300V 350V 400V	1.0V at 2A	2.0 μ s at 1.0A (resistive load)
BUX99	TO-126	1.5A	750V	300V	1V at 0.2A	—
BUX84 BUX85	TO-220A	2A	800V 1000V	400V 450V	1V at 1A/0.2A	0.4 μ s at 1A
BUX84F BUX85F	SOT-186 (F-PAK)	2A	800V 1000V	400V 450V	1V at 1A/0.2A	0.4 μ s at 1A
MJE13004 MJE13005	TO-220AB	4A	600V 700V	300V 400V	0.6V at 2A/0.5A	0.16 μ s at 2A
BUT11 BUT11A	TO-220AB	5A	850V 1000V	400V 450V	1.5V at 3A/0.6A 1.5V at 2.5A/0.5A	80ns at 3A 80ns at 2.5A
BUT11F BUT11AF	SOT-186 (F-PAK)	5A	850V 1000V	400V 450V	1.5V at 3A/0.6A 1.5V at 2.5A/0.5A	80ns at 3A 80ns at 2.5A
BUW11 BUW11A	SOT-93	5A	850V 1000V	400V 450V	1.5V at 3A/0.6A 1.5V at 2.5A/0.5A	80ns at 3A 80ns at 2.5A
BUS11 BUS11A	TO-3	5A	850V 1000V	400V 450V	1.5V at 3A/0.6A 1.5V at 2.5A/0.5A	80ns at 3A 80ns at 2.5A
BUT21A BUT21B BUT21C	TO-220AB	5A	650V 750V 850V	350V 400V 450V	1.5V at 3A/0.34A 1.5V at 3A/0.4A 1.5V at 3A/0.5A	40ns at 3A
BUS21A BUS21B BUS21C	TO-3	5A	650V 750V 850V	350V 400V 450V	1.5V at 3A/0.34A 1.5V at 3A/0.4A 1.5V at 3A/0.5A	40ns at 3A
BUT131 BUT131H BUT131A	TO-220AB	5A	850V 850V 1000V	450V 450V 500V	2.5V at 3A/0.4A 2.5V at 3A/0.3A 2.5V at 3A/0.4A	*70ns at 3A

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PHILIPS COMPONENTS

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