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 Remember to give due consideration to safety when making your circuit designs, with appropriate
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2SB727(K)

Silicon PNP Epitaxial

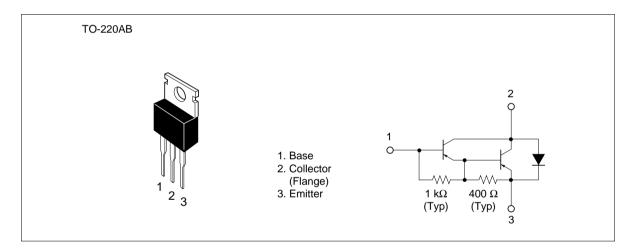


ADE-208-857 (Z) 1st. Edition September 2000

Application

Medium speed and power switching complementary pair with 2SD768(K)

Outline



Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	-120	V
Collector to emitter voltage	V_{CEO}	-120	V
Emitter to base voltage	V_{EBO}	- 7	V
Collector current	I _c	-6	A
Collector peak current	I _{C(peak)}	-10	А
Collector power dissipation	P _C *1	40	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

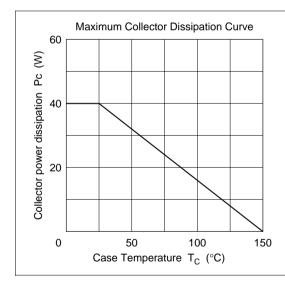
Note: 1. Value at $T_c = 25^{\circ}C$

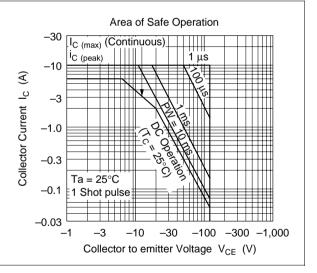
2SB727(K)

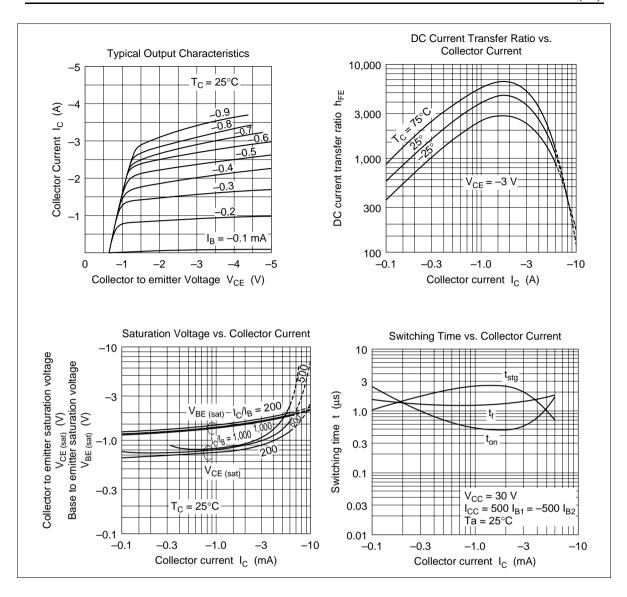
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-120	_	_	V	I_{C} = -25 mA, R_{BE} = ∞
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-7	_	_	V	$I_{E} = -50 \text{ mA}, I_{C} = 0$
Collector cutoff current	I _{CBO}	_	_	-100	μΑ	$V_{CB} = -120 \text{ V}, I_{E} = 0$
	I _{CEO}	_	_	-10	μΑ	$V_{CE} = -100 \text{ V}, R_{BE} = \infty$
DC current transfer ratio	h _{FE}	1000	_	20000		$V_{CE} = -3 \text{ V}, I_{C} = -3 \text{ A}^{*1}$
Collector to emitter saturation	$V_{\text{CE(sat)1}}$	_	_	-1.5	V	$I_{\rm C} = -3 \text{ A}, I_{\rm B} = -6 \text{ mA}^{*1}$
voltage	$V_{\text{CE}(\text{sat})2}$	_	_	-3.0	V	$I_{\rm C} = -6 \text{ A}, I_{\rm B} = -60 \text{ mA}^{*1}$
Base to emitter saturation	$V_{\text{BE}(\text{sat})1}$	_	_	-2.0	V	$I_{\rm C} = -3 \text{ A}, I_{\rm B} = -6 \text{ mA}^{*1}$
voltage	$V_{BE(sat)2}$	_	_	-3.5	V	$I_{\rm C} = -6 \text{ A}, I_{\rm B} = -60 \text{ mA}^{*1}$
Turn on time	t _{on}	_	1.0	_	μs	$I_{\rm C} = -3 \text{ A}, I_{\rm B1} = -I_{\rm B2} = -6 \text{ mA}$
Turn off time	t _{off}	_	3.0	_	μs	

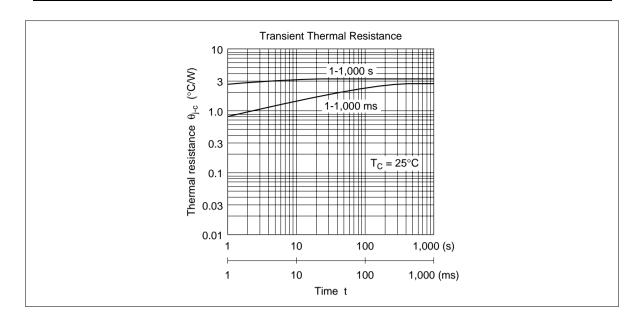
Note: 1. Pulse test







2SB727(K)



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