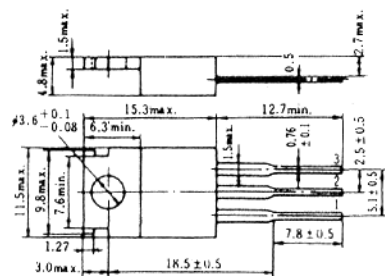


2SB765 (K)

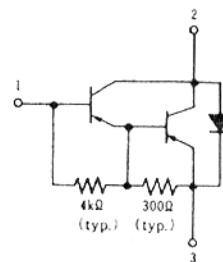
SILICON PNP TRIPLE DIFFUSED

MEDIUM SPEED AND POWER SWITCHING

COMPLEMENTARY PAIR WITH 2SD864 (K)



1. Base
 2. Collector
(Flange)
 3. Emitter
- (Dimensions in mm)



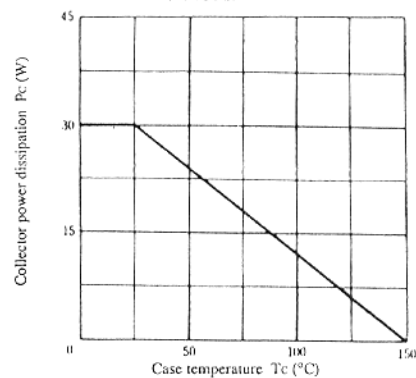
(JEDEC TO-220AB)

■ ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

Item	Symbol	2SB765 (K)	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	-3	A
Collector peak current	$i_{C(\text{peak})}$	-6	A
Collector power dissipation	P_C^*	30	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{sig}	-55 to +150	$^\circ\text{C}$

* Value at $T_C = 25^\circ\text{C}$

MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -25\text{mA}$, $R_{BE} = \infty$	-120	—	—	V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	$I_E = -50\text{mA}$, $I_C = 0$	-7	—	—	V
Collector cutoff current	I_{CBO}	$V_{CB} = -120\text{V}$, $I_E = 0$	—	—	-100	μA
	I_{CEO}	$V_{CE} = -100\text{V}$, $R_{BE} = \infty$	—	—	-10	μA
DC current transfer ratio	h_{FE}	$V_{CE} = -3\text{V}$, $I_C = -1.5\text{A}^*$	1000	—	20000	
Collector to emitter saturation voltage	$V_{CE(\text{sat})1}$	$I_C = -1.5\text{A}$, $I_B = -3\text{mA}^*$	—	—	-1.5	V
	$V_{CE(\text{sat})2}$	$I_C = -3\text{A}$, $I_B = -30\text{mA}^*$	—	—	-3.0	V
Base to emitter saturation voltage	$V_{BE(\text{sat})1}$	$I_C = -1.5\text{A}$, $I_B = -3\text{mA}^*$	—	—	-2.0	V
	$V_{BE(\text{sat})2}$	$I_C = -3\text{A}$, $I_B = -30\text{mA}^*$	—	—	-3.5	V
Turn on time	t_{on}	$I_C = -1.5\text{A}$, $I_{B1} = -I_{B2} = -3\text{mA}$	—	0.8	—	μs
Storage time	t_{sig}		—	3.0	—	μs
Fall time	t_f		—	1.5	—	μs

* Pulse Test

