2SB1054

Silicon PNP triple diffusion planar type

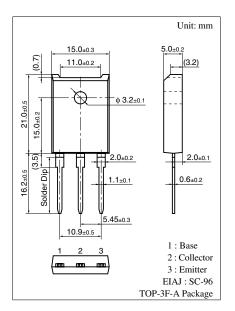
For high power amplification Complementary to 2SD1485

■ Features

- \bullet Excellent current I_C characteristics of forward current transfer ratio h_{FE} vs. collector
- Wide area of safe operation (ASO)
- High transition frequency f_T
- Full-pack package which can be installed to the heat sink with one screw

■ Absolute Maximum Ratings $T_C = 25$ °C

Parameter		Symbol	Rating	Unit
Collector to base voltage		V_{CBO}	-100	V
Collector to emitter voltage		V_{CEO}	-100	V
Emitter to base voltage		V_{EBO}	-5	V
Peak collector current		I_{CP}	-8	A
Collector current		I_{C}	-5	A
Collector power	$T_C = 25^{\circ}C$	P_{C}	60	W
dissipation	$T_a = 25^{\circ}C$		3	
Junction temperature		T _j	150	°C
Storage temperature		T_{stg}	-55 to +150	°C



■ Electrical Characteristics $T_C = 25$ °C

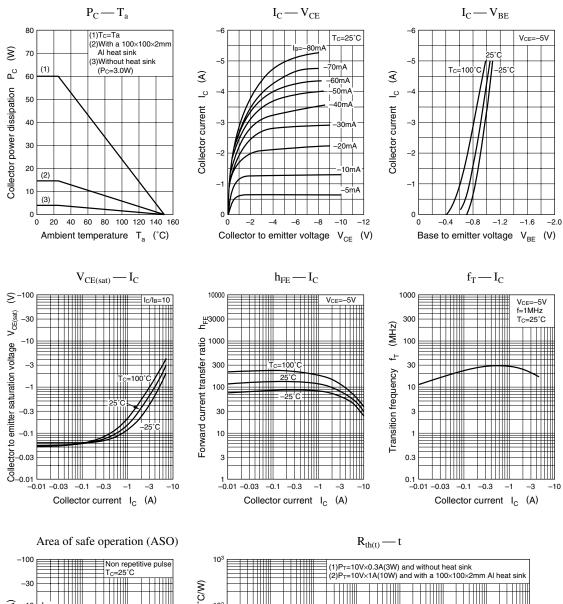
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -100 \text{ V}, I_E = 0$			-50	μΑ
Emitter cutoff current	I_{EBO}	$V_{EB} = -3 \text{ V}, I_C = 0$			-50	μΑ
Forward current transfer ratio	h _{FE1}	$V_{CE} = -5 \text{ V}, I_{C} = -20 \text{ mA}$	20			
	h _{FE2} *	$V_{CE} = -5 \text{ V}, I_{C} = -1 \text{ A}$	60		200	
	h _{FE3}	$V_{CE} = -5 \text{ V}, I_C = -3 \text{ A}$	20			
Base to emitter voltage	V_{BE}	$V_{CE} = -5 \text{ V}, I_{C} = -3 \text{ A}$			-1.8	V
Collector to emitter saturation voltage	V _{CE(sat)}	$I_C = -3 \text{ A}, I_B = -0.3 \text{ A}$			- 0.2	V
Transition frequency	f_T	$V_{CE} = -5 \text{ V}, I_C = -0.5 \text{ A}, f = 1 \text{ MHz}$		20		MHz
Collector output capacitance	C _{ob}	$V_{CB} = -10 \text{ V}, f = 1 \text{ MHz}$		170		pF

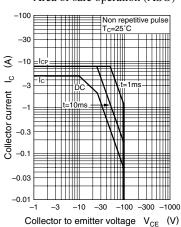
Note) *: Rank classification

Rank	Q	Р
h_{FE2}	60 to 120	100 to 200

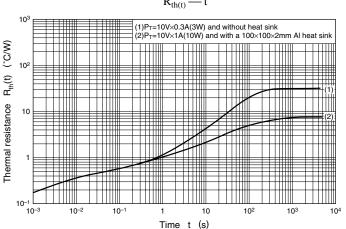
Panasonic 1

2SB1054 Power Transistors





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