2SB1054

Silicon PNP triple diffusion planar type

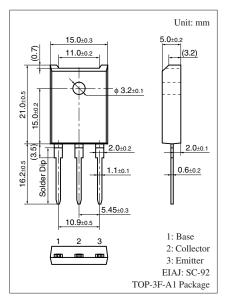
For high power amplification Complementary to 2SD1485

Features

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

Parameter	Symbol	Rating	Unit				
Collector-base voltage (Emitter open)	V _{CBO}	-100	V				
Collector-emitter voltage (Base open)	V _{CEO}	-100	V				
Emitter-base voltage (Collector open)	V _{EBO}	-5	V				
Collector current	I _C	-5	А				
Peak collector current	I _{CP}	-8	А				
Collector power dissipation	P _C	60	W				
$T_a = 25^{\circ}C$		3					
Junction temperature	Tj	150	°C				
Storage temperature	T _{stg}	-55 to +150	°C				

Absolute Maximum Ratings $T_C = 25^{\circ}C$



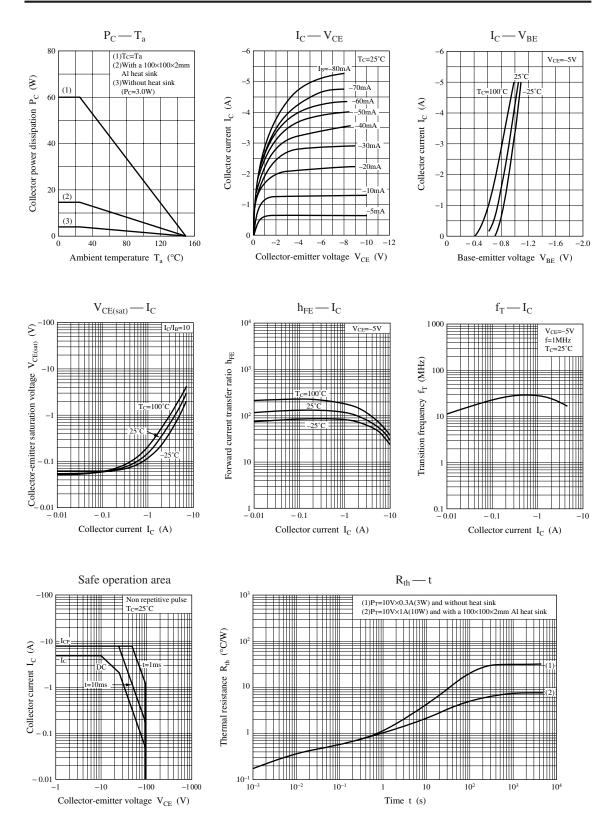
Electrical Characteristics $T_C = 25^{\circ}C \pm 3^{\circ}C$

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Base-emitter voltage	V _{BE}	$V_{CE} = -5 V, I_C = -3 A$			-1.8	V
Collector-base cutoff current (Emitter open)	I _{CBO}	$V_{CB} = -100 \text{ V}, I_E = 0$			-50	μΑ
Emitter-base cutoff current (Collector open)	I _{EBO}	$V_{EB} = -3 V, I_C = 0$			-50	μΑ
Forward current transfer ratio	h _{FE1}	$V_{CE} = -5 \text{ V}, I_C = -20 \text{ mA}$	20			_
	h _{FE2} *	$V_{CE} = -5 V, I_C = -1 A$	40		200	
	h _{FE3}	$V_{CE} = -5 V, I_C = -3 A$	20			
Collector-emitter saturation voltage	V _{CE(sat)}	$I_{\rm C} = -3$ A, $I_{\rm B} = -0.3$ A			-2.0	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}	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		170		pF
(Common base, input open circuited)						

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *: Rank classification

Rank	R	Q	Р
h _{FE2}	40 to 80	60 to 120	100 to 200



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