2SB0931 (2SB931)

Silicon PNP epitaxial planar type

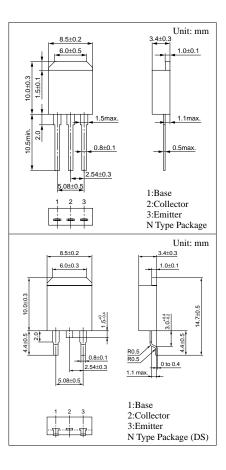
For power switching Complementary to 2SD1254

Features

- Low collector to emitter saturation voltage V_{CE(sat)}
- Satisfactory linearity of foward current transfer ratio h_{FE}
- Large collector current I_C
- N type package enabling direct soldering of the radiating fin to the printed circuit board, etc. of small electronic equipment.

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

Parameter		Symbol	Ratings	Unit	
Collector to base voltage		V_{CBO}	-130	V	
Collector to emitter voltage		V_{CEO}	-80	V	
Emitter to base voltage		V_{EBO}	-7	V	
Peak collector current		I_{CP}	-6	A	
Collector current		I_{C}	-3	A	
Collector power	T _C =25°C	D	30	337	
dissipation	Ta=25°C	P_{C}	1.3	W	
Junction temperature		T_{j}	150	°C	
Storage temperature		T_{stg}	-55 to +150	°C	



■ Electrical Characteristics (T_C=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -100V, I_E = 0$			-10	μΑ
Emitter cutoff current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-50	μΑ
Collector to emitter voltage	V _{CEO}	$I_{C} = -10\text{mA}, I_{B} = 0$	-80			V
Forward current transfer ratio	h _{FE1}	$V_{CE} = -2V, I_C = -0.1A$	45			
	h _{FE2} *	$V_{CE} = -2V, I_C = -0.5A$	90		260	
Collector to emitter saturation voltage	V _{CE(sat)}	$I_C = -2A, I_B = -0.1A$			- 0.5	V
Base to emitter saturation voltage	V _{BE(sat)}	$I_C = -2A, I_B = -0.1A$			-1.5	V
Transition frequency	f_T	$V_{CE} = -10V$, $I_{C} = -0.5A$, $f = 10MHz$		30		MHz
Turn-on time	t _{on}	1 054		0.3		μs
Storage time	t _{stg}	$I_{\rm C} = -0.5$ A,		1.1		μs
Fall time	t_{f}	$I_{B1} = -50 \text{mA}, I_{B2} = 50 \text{mA}$		0.3		μs

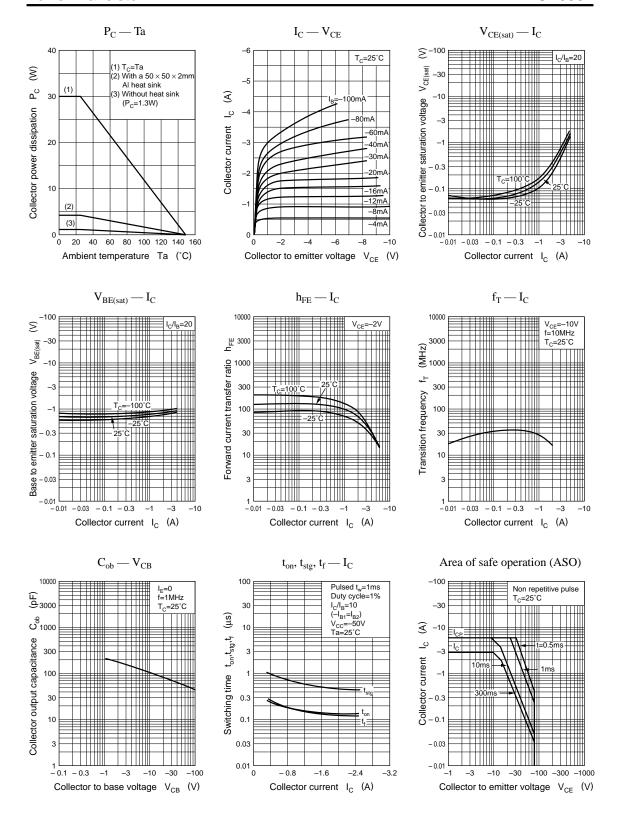
*h_{FE2} Rank classification

Rank	Q	P		
h _{FE2}	90 to 180	130 to 260		

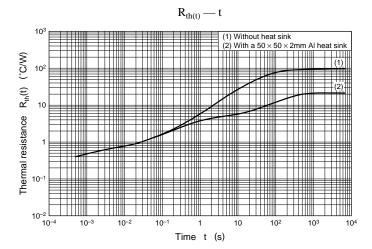
Note) The part number in the parenthesis shows conventional part number.

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Power Transistor 2SB0931



Power Transistor 2SB0931



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