2SB0819 (2SB819)

Silicon PNP epitaxial planar type

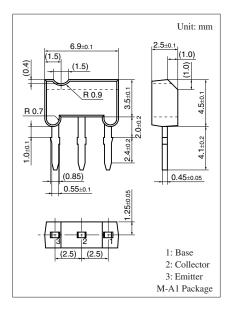
For low-frequency output amplification Complementary to 2SD1051

Features

- \bullet High collector-emitter voltage (Base open) $V_{\mbox{\scriptsize CEO}}$
- \bullet Large collctor power dissipation P_{C}
- M type package allowing easy automatic and manual insertion as well as stand-alone fixing to the printed circuit board.

5 a						
Parameter	Symbol	Rating	Unit			
Collector-base voltage (Emitter open)	V _{CBO}	-50	V			
Collector-emitter voltage (Base open)	V _{CEO}	-40	V			
Emitter-base voltage (Collector open)	V _{EBO}	-5	V			
Collector current	I _C	-1.5	А			
Peak collector current	I _{CP}	-3	А			
Collector power dissipation *	P _C	1	W			
Junction temperature	Tj	150	°C			
Storage temperature	T _{stg}	-55 to +150	°C			

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



Note) *: Print circuit board: Copper foil area of 1 cm² or more, and the board thickness of 1.7 mm for the collector portion

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

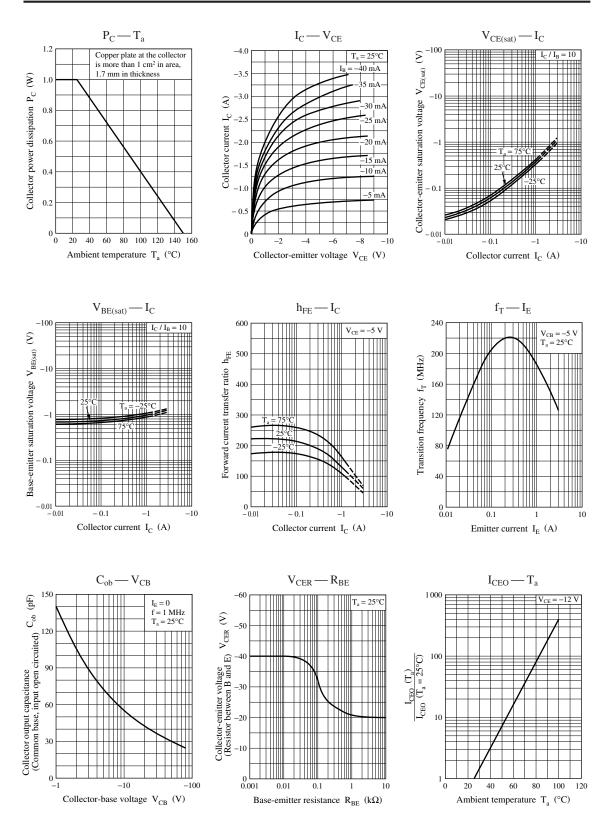
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V _{CBO}	$I_{\rm C} = -1 {\rm mA}, I_{\rm E} = 0$	-50			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_{\rm C} = -2 \text{ mA}, I_{\rm B} = 0$	-40			V
Collector-base cutoff current (Emitter open)	I _{CBO}	$V_{CB} = -20 \text{ V}, I_E = 0$			-1	μΑ
Collector-emitter cutoff current (Base open)	I _{CEO}	$V_{CE} = -10 \text{ V}, I_B = 0$			-100	μΑ
Emitter-base cutoff current (Collector open)	I _{EBO}	$V_{EB} = -5 V, I_C = 0$			-10	μΑ
Forward current transfer ratio *1, 2	h _{FE}	$V_{CE} = -5 V, I_C = -1 A$	80		220	
Collector-emitter saturation voltage *1	V _{CE(sat)}	$I_{\rm C} = -1.5 \text{ A}, I_{\rm B} = -0.15 \text{ A}$			-1	V
Base-emitter saturation voltage *1	V _{BE(sat)}	$I_{\rm C} = -2$ A, $I_{\rm B} = -0.2$ A			-1.5	V
Transition frequency	f _T	$V_{CB} = -5 \text{ V}, I_E = 0.5 \text{ A}, f = 200 \text{ MHz}$		150		MHz
Collector output capacitance	C _{ob}	$V_{CB} = -20 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		45		pF
(Common base, input open circuited)						

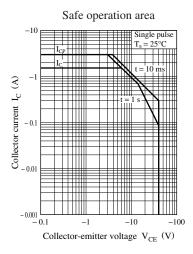
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *1: Pulse measurement

*2: Rank classification					
Rank	Q	R			
$h_{\rm FE}$	80 to 160	120 to 220			

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





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