2SB0642 (2SB642)

Silicon PNP epitaxial planar type

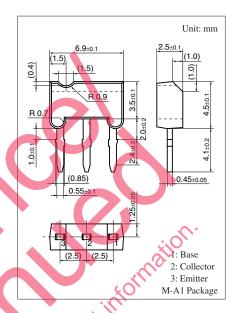
For low-power general amplification

■ Features

- High forward current transfer ratio hFE
- M type package allowing easy automatic and manual insertion as well as stand-alone fixing to the printed circuit board.

■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V _{CBO}	-60	V
Collector-emitter voltage (Base open)	V _{CEO}	-50	V
Emitter-base voltage (Collector open)	V_{EBO}	-7	V
Collector current	I_C	-100	mA
Peak collector current	I_{CP}	-200	mA
Collector power dissipation	P_{C}	400	mW
Junction temperature	Tj	150	°C
Storage temperature	T _{stg}	-55 to +150	°C



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

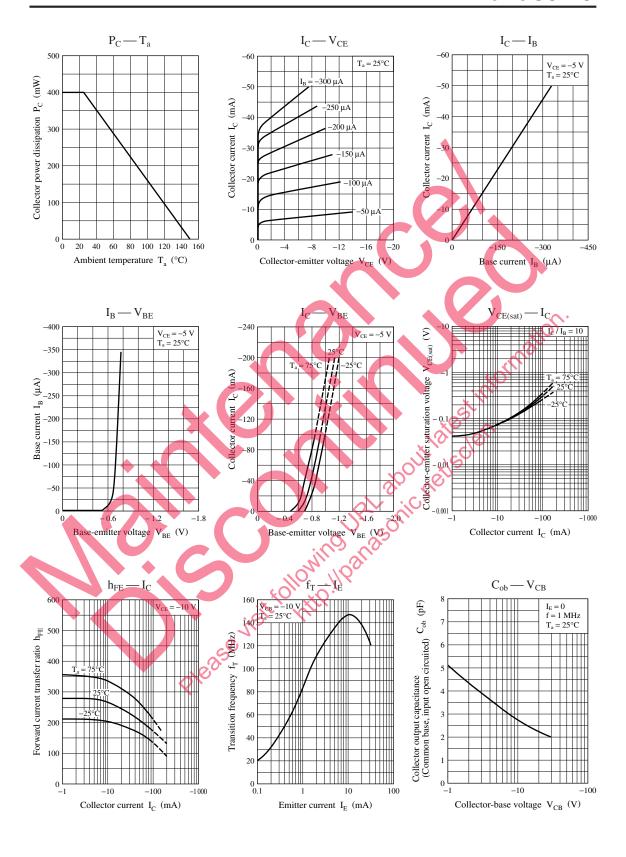
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_{\rm C} = -10 \mu A, I_{\rm E} = 0$	-60			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_{\rm C} = -2 \text{ mA}, I_{\rm R} = 0$	-50			V
Emitter-base voltage (Collector open)	V _{EBO}	$I_{\rm E} = -10$ µA, $I_{\rm C} = 0$	-7			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}	$V_{CE} = -20 \text{ V}, I_{B} = 0$			-1	μΑ
Forward current transfer ratio *	h _{FE}	$V_{CE} = -10 \text{ V}, I_{C} = -2 \text{ mA}$	160		460	_
Collector-emitter saturation voltage	VE(sat)	$I_C = -100 \text{ mA}, I_B = -10 \text{ mA}$			-1	V
Transition frequency	f_{T}	$V_{CB} = -10 \text{ V}, I_E = 2 \text{ mA}, f = 200 \text{ MHz}$		80		MHz
Collector output capacitance	C _{ob}	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		3.5		pF
(Common-emitter reverse transfer)						

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

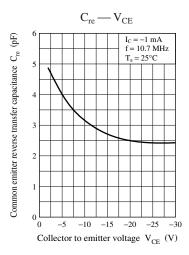
2. *: Rank classification

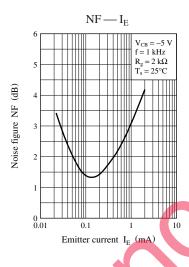
Rank	Q	R	S
h_{FE1}	160 to 260	210 to 340	290 to 460

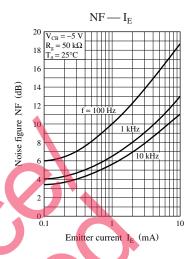
Note) The part number in the parenthesis shows conventional part number.

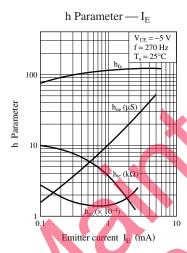


Panasonic 2SB0642

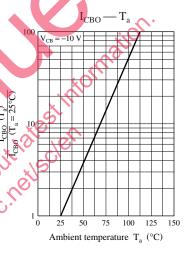












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