2SD0958 (2SD958)

Silicon NPN epitaxial planar type

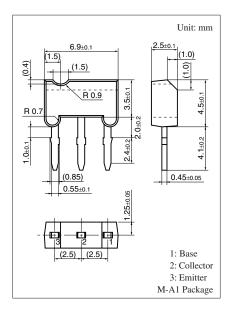
For low-frequency and low-noise amplification Complementary to 2SB0788 (2SB788)

■ Features

- ullet High collector-emitter voltage (Base open) V_{CEO}
- Low noise voltage NV
- 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}	120	V
Collector-emitter voltage (Base open)	V _{CEO}	120	V
Emitter-base voltage (Collector open)	V_{EBO}	7	V
Collector current	I_C	20	mA
Peak collector current	I_{CP}	50	mA
Collector power dissipation	P _C	400	mW
Junction temperature	T_{j}	150	°C
Storage temperature	T _{stg}	-55 to +150	°C



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

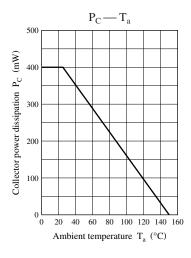
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V _{CBO}	$I_C = 10 \ \mu A, I_E = 0$	120			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_C = 1 \text{ mA}, I_B = 0$	120			V
Emitter-base voltage (Collector open)	V _{EBO}	$I_E = 10 \ \mu A, \ I_C = 0$	7			V
Collector-base cut-off current (Emitter open)	I_{CBO}	$V_{CB} = 50 \text{ V}, I_{E} = 0$			100	nA
Collector-emitter cutoff current (Base open)	I_{CEO}	$V_{CE} = 50 \text{ V}, I_{B} = 0$			1	μΑ
Forward current transfer ratio *	h _{FE}	$V_{CE} = 5 \text{ V}, I_C = 2 \text{ mA}$	180		700	_
Collector-emitter saturation voltage	V _{CE(sat)}	$I_C = 20 \text{ mA}, I_B = 2 \text{ mA}$			0.6	V
Transition frequency	f_T	$V_{CB} = 5 \text{ V}, I_E = -2 \text{ mA}, f = 200 \text{ MHz}$		200		MHz
Noise voltage	NV	$V_{CE} = 40 \text{ V}, I_{C} = 1 \text{ mA}, G_{V} = 80 \text{ dB}$			150	mV
		$R_g = 100 \text{ k}\Omega$, Function = FLAT				

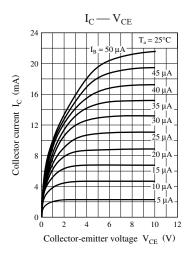
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

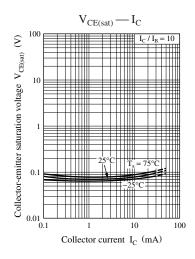
2. *: Rank classification

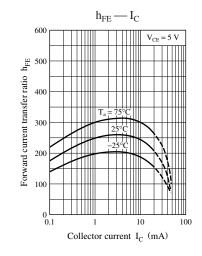
Rank	R	S	Т
h _{FE}	180 to 360	260 to 520	360 to 700

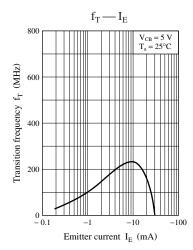
Note) The part number in the parenthesis shows conventional part number.

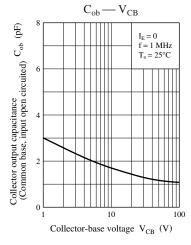


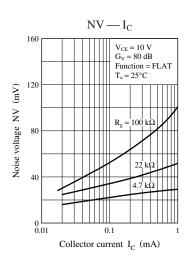












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