# 2SD0637 (2SD637)

# Silicon NPN epitaxial planer type

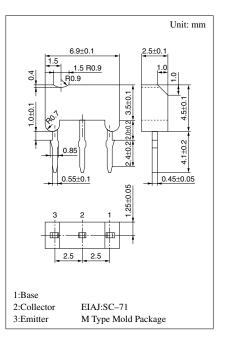
For low-power general amplification

## Features

- High foward current transfer ratio  $h_{FE}$ .
- Low collector to emitter saturation voltage V<sub>CE(sat)</sub>.
- M type package allowing easy automatic and manual insertion as well as stand-alone fixing to the printed circuit board.

	-		
Parameter	Symbol	Ratings	Unit
Collector to base voltage	V <sub>CBO</sub>	60	V
Collector to emitter voltage	V <sub>CEO</sub>	50	V
Emitter to base voltage	V <sub>EBO</sub>	7	V
Peak collector current	I <sub>CP</sub>	200	mA
Collector current	I <sub>C</sub>	100	mA
Collector power dissipation	P <sub>C</sub>	400	mW
Junction temperature	Tj	150	°C
Storage temperature	T <sub>stg</sub>	-55 ~ +150	°C

## Absolute Maximum Ratings (Ta=25°C)



## Electrical Characteristics (Ta=25°C)

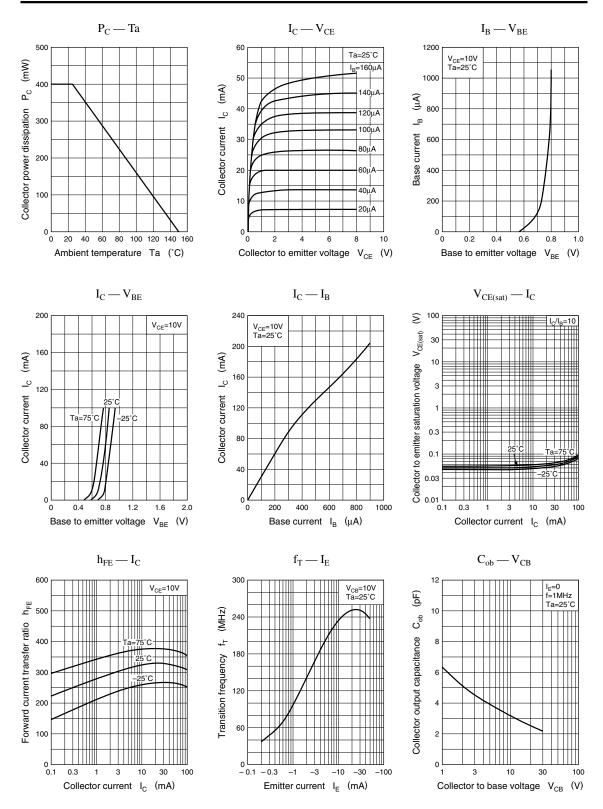
Parameter	Symbol	Conditions min		typ	max	Unit
Collector cutoff current	I <sub>CBO</sub>	$V_{CB} = 20V, I_E = 0$			1	μA
	I <sub>CEO</sub>	$V_{CE} = 20V, I_B = 0$			1	μΑ
Collector to base voltage	V <sub>CBO</sub>	$I_{\rm C} = 10\mu A, I_{\rm E} = 0$	60			V
Collector to emitter voltage	V <sub>CEO</sub>	$I_{\rm C} = 2{\rm mA}, I_{\rm B} = 0$	50			V
Emitter to base voltage	V <sub>EBO</sub>	$I_{\rm E} = 10\mu A, I_{\rm C} = 0$	7			V
Forward current transfer ratio	h <sub>FE</sub> *	$V_{CE} = 10V, I_{C} = 2mA$	160		460	
Collector to emitter saturation voltage	V <sub>CE(sat)</sub>	$I_{\rm C} = 100 {\rm mA}, I_{\rm B} = 10 {\rm mA}$		0.3	0.5	V
Transition frequency	f <sub>T</sub>	$V_{CB} = 10V, I_E = -2mA, f = 200MHz$		150		MHz
Collector output capacitance	C <sub>ob</sub>	$V_{CB} = 10V, I_E = 0, f = 1MHz$		3.5		pF

#### \*hFE Rank classification

Rank	Q	R	S
h <sub>FE</sub>	160 ~ 260	210 ~ 340	290 ~ 460

Note.) The Part number in the Parenthesis shows conventional part number.

# Transistor

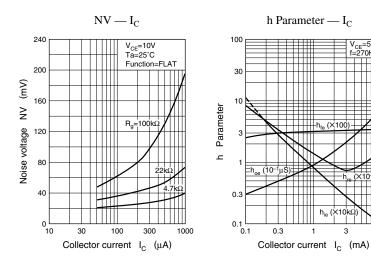


#### Panasonic

=5V 270Hz

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