Transistors Panasonic

2SD2345J

Silicon NPN epitaxial planar type

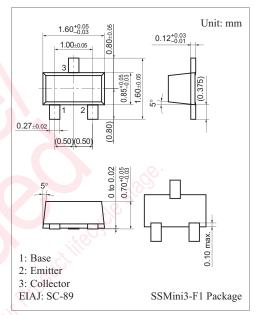
For low frequency amplification

■ Features

- High forward current transfer ratio h_{FE}
- ullet Low collector-emitter saturation voltage $V_{\text{CE(sat)}}$
- ullet High emitter-base voltage (Collector open) V_{EBO}
- Low noise voltage NV

■ Absolute Maximum Ratings $T_a = 25$ °C

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}	15	V	
Collector current	$I_{\rm C}$	50	mA	
Peak collector current	I_{CP}	100	mA	
Collector power dissipation	$P_{\rm C}$	125	mW	
Junction temperature	T_j	125	°C	
Storage temperature	T _{stg}	-55 to +125	°C	



Marking Symbol: 1Z

■ Electrical Characteristics $T_a = 25$ °C±3°C

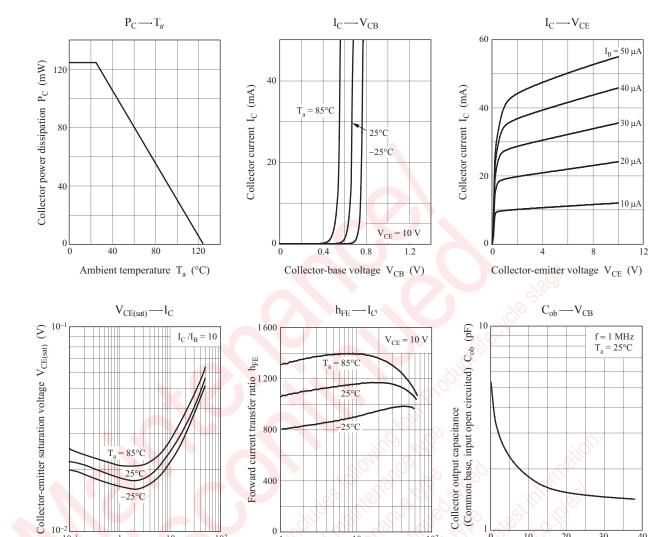
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V _{CBO}	$I_{\rm C} = 10 \mu A, I_{\rm E} = 0$	50	Ul		V
Collector-emitter voltage (Base open)	V_{CEO}	$I_{CI} = 1 \text{ mA}, I_{B} = 0$	40			V
Emitter-base voltage (Collector open)	$V_{\rm EBO}$	$I_{\rm E} = 10 \mu A, I_{\rm C} = 0$	15			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = 20 \text{ V}, I_{E} = 0$			0.1	μΑ
Collector-emitter cutoff current (Base open)	I_{CEO}	$V_{CH} = 20 \text{ V}, I_B = 0$			1	μΑ
Forward current transfer ratio *	h_{FE}	$V_{CH} = 10 \text{ V}, I_{C} = 2 \text{ mA}$	600		2000	_
Collector-emitter saturation voltage	V _{CE(sat)}	$I_{CI} = 10 \text{ mA}, I_{B} = 1 \text{ mA}$		0.05	0.2	V
Transition frequency	f_T	$V_{CB} = 10 \text{ V}, I_{H} = -2 \text{ mA}, f = 200 \text{ MHz}$		120		MHz

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

2. *: Rank classification

Rank	S	Т
h_{FE}	600 to 1200	1 000 to 2 000

2SD2345J **Panasonic**



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Collector current I_C (mA)

Collector-base voltage V_{CB} (V)

2 SJC00337AED

10

Collector current I_C (mA)

10⁻²

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