2SD2259

Silicon NPN epitaxial planar type

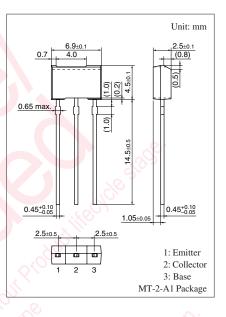
For low-frequency amplification

Features

- \bullet High forward current transfer ratio h_{FE}
- Low collector-emitter saturation voltage $V_{CE(sat)}$
- Allowing supply with the radial taping

The solute maximum matings $T_a = 25$ C							
Symbol	Rating	Unit					
V _{CBO}	20	v					
V _{CEO}	20	V					
V _{EBO}	15	V					
I _C	0.7	А					
I _{CP}	1.5	А					
P _C	1	W					
Tj	150	°C					
T _{stg}	-55 to +150	°CO					
	Symbol V _{CBO} V _{CEO} V _{EBO} I _C I _C P _C T _j	a Symbol Rating V _{CBO} 20 V _{CEO} 20 V _{EBO} 15 I _C 0.7 I _{CP} 1.5 P _C 1 T _j 150					





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

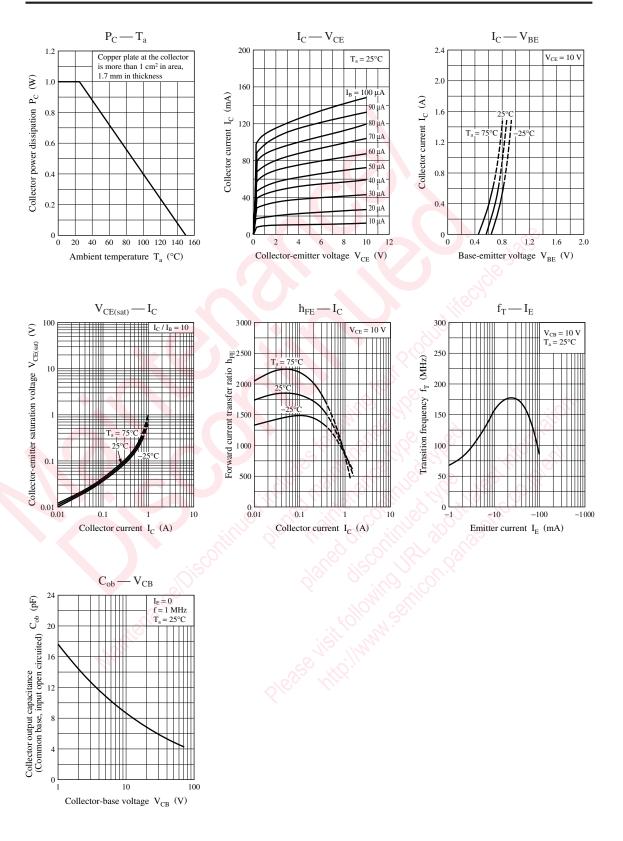
Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V _{CBO}	$I_{\rm C} = 10 \ \mu A, I_{\rm E} = 0$	20	0		V
Collector-emitter voltage (Base open)	V _{CEO}	$I_{\rm C} = 1 \text{ mA}, I_{\rm B} = 0$	20			V
Emitter-base voltage (Collector open)	V _{EBO}	$I_{\rm E} = 10 \ \mu A, I_{\rm C} = 0$	15			V
Collector-base cutoff current (Emitter open)	I _{CBO}	$V_{CB} = 15 \text{ V}, I_E = 0$			1	μΑ
Collector-emitter cutoff current (Base open)	I _{CEO}	$V_{CE} = 15 \text{ V}, I_B = 0$			10	μΑ
Forward current transfer ratio *	h _{FE}	$V_{CE} = 10 \text{ V}, \text{ I}_{C} = 150 \text{ mA}$	1 0 0 0		2 5 0 0	_
Collector-emitter saturation voltage *	V _{CE(sat)}	$I_{\rm C} = 500 \text{ mA}, I_{\rm B} = 50 \text{ mA}$		0.15	0.40	V
Transition frequency	f _T	$V_{CB} = 20 \text{ V}, I_E = -20 \text{ mA}, f = 200 \text{ MHz}$		55		MHz
Collector output capacitance	C _{ob}	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		10	15	pF
(Common base, input open circuited)						

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

2. *: Pulse measurement

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