2SD2179

Silicon NPN epitaxial planer type

For low-frequency output amplification Complementary to 2SB1446

Features

- Low collector to emitter saturation voltage V_{CE(sat)}.
- Complementary pair with 2SB1446.
- Allowing supply with the radial taping.

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	V _{CBO}	50	V
Collector to emitter voltage	V _{CEO}	50	V
Emitter to base voltage	V _{EBO}	5	V
Peak collector current	I _{CP}	7	A
Collector current	I_{C}	5	A
Collector power dissipation	P _C *	1	W
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	−55 ~ +150	°C

 $^{^{*1}}$ Printed circuit board: Copper foil area of $1 \mathrm{cm}^2$ or more, and the board thickness of 1.7mm for the collector portion

Unit: mm 0.65 max $0.45^{+0.10}_{-0.05}$ 0.45+0.10 Note: In addition to the 1:Emitter 2:Collector lead type shown in 3:Base the upper figure, the type as shown in MT-2-A1 Package the lower figure is also available. <u>1.2</u>±0.1 (HW type)

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 20V, I_{E} = 0$			0.1	μА
Collector to base voltage	V_{CBO}	$I_{\rm C} = 10 \mu A, I_{\rm E} = 0$	50			V
Collector to emitter voltage	V _{CEO}	$I_{C} = 1 \text{mA}, I_{B} = 0$	50			V
Emitter to base voltage	V_{EBO}	$I_{\rm E} = 10 \mu A, I_{\rm C} = 0$	5			V
Forward current transfer ratio	h _{FE1} *1	$V_{CE} = 2V, I_C = 500 \text{mA}^{*2}$	120		340	
	h _{FE2}	$V_{CE} = 2V, I_{C} = 2.5A^{*2}$	60			
Collector to emitter saturation voltage	V _{CE(sat)}	$I_C = 2A, I_B = 100 \text{mA}^{*2}$		0.19	0.3	V
Base to emitter saturation voltage	V _{BE(sat)}	$I_C = 2A, I_B = 100mA^{*2}$		0.85	1.2	V
Transition frequency	f _T	$V_{CB} = 10V, I_{E} = -50mA, f = 200MHz$		80		MHz
Collector output capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$		60	70	pF

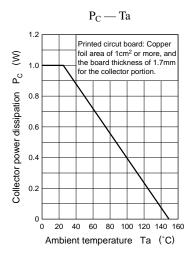
^{*2} Pulse measurement

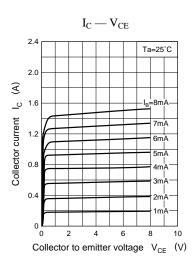
^{*1}hFE1 Rank classification

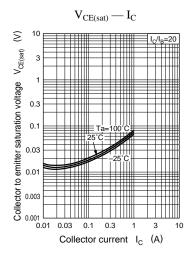
Rank	R	S
h _{FE1}	120 ~ 240	170 ~ 340

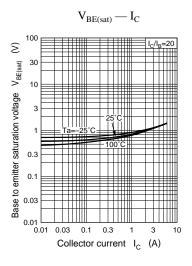
672 Panasonic

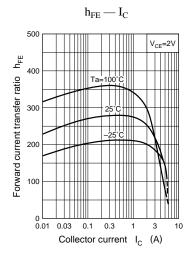
Transistor 2SD2179

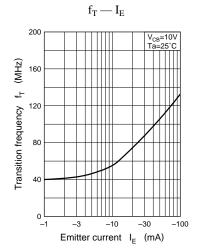


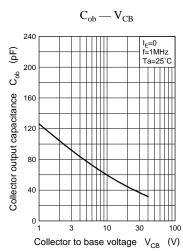












Panasonic 673

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