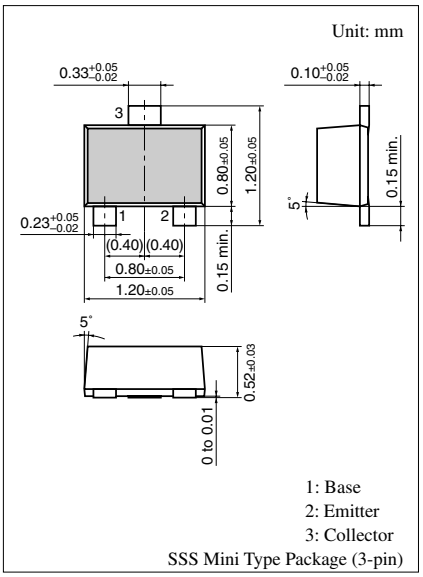
2SC5609

Silicon PNP epitaxial planer type

For general amplification
Complementary to 2SA2021



Marking Symbol: 3F

■ Features

- High foward current transfer ratio h_{FE}
- SSS-mini type package, allowing downsizing and thinning of the equipment and automatic insertion through the tape packing

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	60	V
Collector to emitter voltage	V_{CEO}	50	V
Emitter to base voltage	V_{EBO}	7	V
Peak collector current	I_{CP}	200	mA
Collector current	I_C	100	mA
Collector power dissipation	P_C	100	mW
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	−55 to +125	°C

■ Electrical Characteristics $T_a = 25°C \pm 3°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = 20 V, I_E = 0			0.1	μA
	I_{CEO}	V_{CE} = 10 V, I_B = 0			100	μA
Collector to base voltage	V_{CBO}	I_C = 10 μA, I_E = 0	60			V
Collector to emitter voltage	V_{CEO}	I_C = 2 mA, I_B = 0	50			V
Emitter to base voltage	V_{EBO}	I_E = 10 μA, I_C = 0	7			V
Forward current transfer ratio	h_{FE1}	V_{CE} = 10 V, I_C = 2 mA	180		390	
	h_{FE2}	V_{CE} = 2 V, I_C = 100 mA	90			
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = 100 mA, I_B = 10 mA		0.1	0.3	V
Collector output capacitance	C_{ob}	V_{CB} = 10 V, I_E = 0, f = 1 MHz		3.5		pF
Transition frequency	f_T	V_{CB} = 10 V, I_E = −2 mA, f = 200 MHz		80		MHz

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