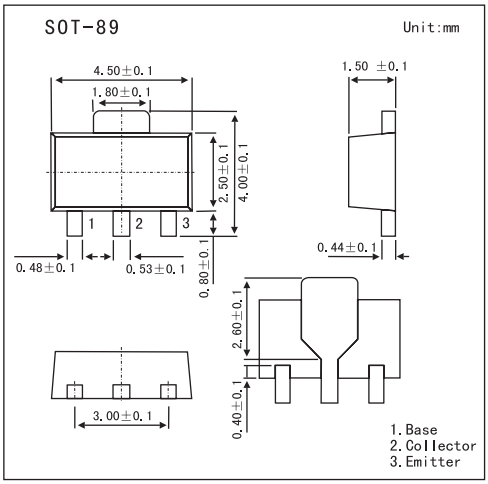
NPN Epitaxial Planar Silicon Transistors

2SC4080



■ Features

- ● High Ft
- ● High breakdown voltage
- ● Small reverse transfer capacitance excellent high-frequency characteristic
- ● Adoption of FBET prccess

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
collector-base voltage	V_{CBO}	200	V
collector-emitter voltage	V_{CEO}	200	V
emitter-base voltage	V_{EBO}	4	V
collector current	I_C	100	mA
Collector Current (pulse)	I_{CP}	200	mA
Collector Dissipation	P_C	500	mA
		1.3	W
Junotion Temperature	T_J	150	℃
storage Temperature	T_{stg}	-55 to 150	℃

*Mounted on ceramic board (250mm^{2}X0.8mm)

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■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
collector cutoff Current	I_{CBO}	V_{CB}=150V,I_E=0			0.1	μA
Emitter cutoff current	I_{EBO}	V_{EB}=2V,I_C=0			1.0	μA
DC Current Gain	h_{FE}	V_{CE}=10V,I_C=10mA	40		320	
		V_{CE}=10V,I_C=100mA	20			
Gain-Bandwidth product	f_T	V_{CE}=30V,I_C=30mA		400		MHz
Output Capacitance	C_{ob}	V_{CB}=30V,f=1MHz		1.8		pF
Reverse Transfer	C_{re}	V_{CB}=30V,f=1MHz		1.4		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=20mA,I_B=2mA			1	V
Base to Emitter Stauration Voltage	$V_{BE(sat)}$	I_C=20mA,I_B=2mA			1	V
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=10μA,I_E=0	200			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	200			V
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	4			V

■ h_{FE} Classification

Marking	Cl			
Rank	C	D	E	F
Type	40 to 80	60 to 120	100 to200	160 to 320