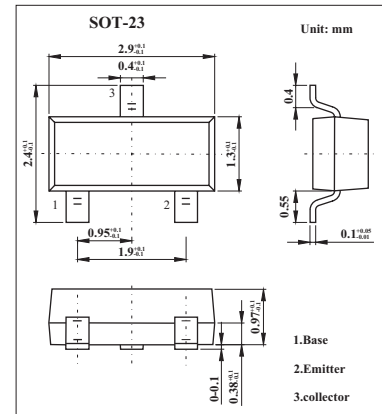


Silicon NPN Epitaxial Planar Type

2SC2778

■ Features

- Optimum for RF amplification, oscillation, mixing, and IF of FM/AM radios.
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	30	V
Collector-emitter voltage	V_{CE0}	20	V
Emitter-base voltage	V_{EB0}	5	V
Collector current	I_C	30	mA
Collector power dissipation	P_C	200	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base voltage	V_{CB0}	$I_C = 10\mu\text{A}, I_E = 0$	30			V
Collector-emitter voltage	V_{CE0}	$I_C = 2\text{ mA}, I_B = 0$	20			V
Emitter-base voltage	V_{EB0}	$I_E = 10\mu\text{A}, I_C = 0$	5			V
Forward current transfer ratio	h_{FE}	$V_{CE} = 10\text{ V}, I_C = 1\text{ mA}$	70		250	
Transition frequency	f_T	$V_{CB} = 10\text{ V}, I_E = -1\text{ mA}, f = 200\text{ MHz}$	150	230		MHz
Reverse transfer capacitance	C_{re}	$V_{CB} = 10\text{ V}, I_E = -1\text{ mA}, f = 10.7\text{ MHz}$		1.3		pF

■ h_{FE} Classification

Marking	KB	KC
h_{FE}	70~160	110~250