

Silicon PNP Epitaxial

2SA1566

■ Features

- Low frequency amplifier.

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CB0}	-120	V
Collector to emitter voltage	V_{CE0}	-120	V
Emitter to base voltage	V_{EB0}	-5	V
Collector current	I_C	-100	mA
Collector power dissipation	P_C	150	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 to base breakdown voltage	$V_{(BR)CB0}$	$I_C = -10 \mu\text{A}, I_E = 0$	-120			V
Collector to emitter breakdown voltage	$V_{(BR)CE0}$	$I_C = -1 \text{ mA}, R_{BE} = \infty$	-120			V
Emitter to base breakdown voltage	$V_{(BR)EB0}$	$I_E = -10 \mu\text{A}, I_C = 0$	-5			V
Collector cutoff current	I_{CBO}	$V_{CB} = -70 \text{ V}, I_E = 0$			-0.1	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -2 \text{ V}, I_C = 0$			-0.1	μA
DC current transfer ratio	h_{FE}	$V_{CE} = -12 \text{ V}, I_C = -2 \text{ mA}$	250		800	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$			-0.15	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$			1.2	V

■ h_{FE} Classification

Marking	JID	JIE
Rank	D	E
h_{FE}	250~500	400~800