

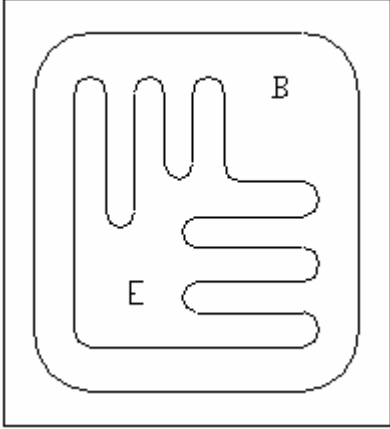
9013B Silicon NPN Epitaxial Transistor

Description :The 9013B is designed for audio frequency general amplifier applications

Features: ●Excellent h_{FE} Linearity

●Complementary to 9012B

Chip Appearance

	Chip Size		490um × 490um
	Chip Thickness		210 ± 20um
	Bonding Pad Size	Base	110um × 110um
		Emitter	110um × 110um
	Front Metal		Al
	Backside Metal		Au(As)
	Scribe line width		55um
	Wafer Size		6 inch

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

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=35\text{V}, I_E=0$		0.1	uA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$		0.1	uA
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=0.1\text{mA}$	40		V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=1\text{mA}$	25		V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=0.1\text{mA}$	5		V
DC Current Gain	h_{FE}	$V_{CE}=1\text{V}, I_C=50\text{mA}$	150	400	
Collector Saturation Voltage	$V_{CE(sat)}$	$I_C=500\text{mA}, I_B=50\text{mA}$		0.5	V