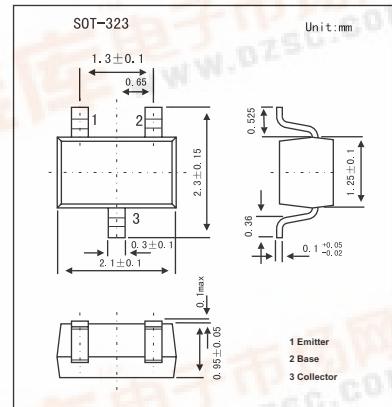


SMD Type Transistors

NPN Epitaxial Planar Silicon Transistor
2SC4446

■ Features

- Very small-sized package
- High VEBO.

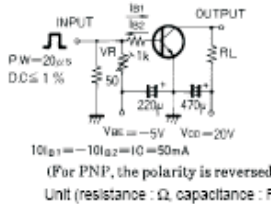


■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	VCBO	60	V
Collector-emitter voltage	VCEO	50	V
Emitter-base voltage	VEBO	15	V
Collector current	IC	150	mA
Collector current(Pulse)	ICP	300	mA
Base current	IB	30	mA
Collector dissipation	PC	150	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

2SC4446

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit	
Collector cutoff current	I _{CBO}	V _{CB} = 40V, I _E =0			0.1	μA	
Emitter cutoff current	I _{EBO}	V _{EB} = 10V, I _C =0			0.1	μA	
DC current gain	h _{FE}	V _{CE} = 6V, I _C = 1mA	135		600		
Gain bandwidth product	f _T	V _{CE} = 6V, I _C = 1mA		130		MHz	
Collector-to-emitter saturation voltage	V _{CE(sat)}	I _C = 50mA, I _B = 5mA		0.15	0.5	V	
Base-to-emitter saturation voltage	V _{BE(sat)}	I _C = 50mA, I _B = 5mA		0.85	1.2	V	
Collector-to-base breakdown voltage	V _{(BR)CBO}	I _C = 10μA, I _E = 0	60			V	
Collector-to-emitter breakdown voltage	V _{(BR)CEO}	I _C = 1mA, R _{BE} = ∞	50			V	
Emitter-to-base breakdown voltage	V _{(BR)EBO}	I _E = 10μA, I _C = 0	15			V	
Output capacitance	C _{ob}	V _{CB} = 6V, f = 1MHz		2.2		pF	
Turn-on time	t _{on}			50		ns	
Storage time	t _{stg}				590		ns
Fall time	t _f				110		ns

■ hFE Classification

Marking	H		
Rank	5	6	7
hFE	135~270	200~400	300~600