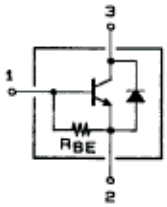
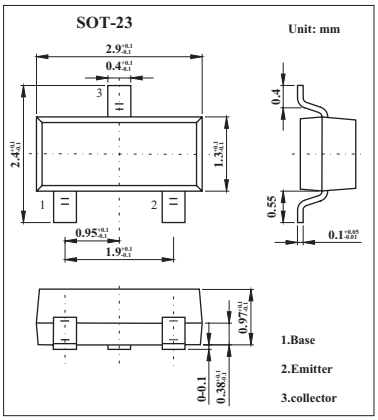
NPN Epitaxial Planar Silicon Transistor

2SD2324

Features

- Low saturation voltage.
- Contains a diode between colletor and emitter.
- Contains a bias resistor between base and emitter.
- Large current capacity.
- Small-sized package facilitating the realization of high-density, small-sized hybrid ICs.





Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage, With Zener diode (11□3V)	V_{CBO}	20	V
Collector-emitter voltage, With Zener diode (11□3V)	V_{CEO}	15	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	0.8	A
Collector current (pulse)	I_{CP}	2	A
Collector dissipation	P_C	200	mW
Jumction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = 15V , I_E = 0			1.0	μA
DC current Gain	h_{FE}	V_{CE} = 2V , I_C = 0.5A	70			
Gain bandwidth product	f_T	V_{CE} = 2V , I_C = 0.5A		150		MHz
Output capacitance	C_{ob}	V_{CB} = 10V , f = 1MHz		15		pF
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = 500mA , I_B = 10mA		0.16	0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C = 500mA , I_B = 10mA		0.85	1.2	V
Collector-to-base breakdown voltage	$V_{(BR)CBO}$	I_C = 10μA , I_E = 0	20			V
Collector-to-emitter breakdown voltage	$V_{(BR)CEO}$	I_C = 10μA , R_{BE} = ∞	20			V
		I_C = 10mA , R_{BE} = ∞	15			
Diode forward voltage	V_F	I_F = 0.5A			1.5	V
Base-emitter resistance	R_{BE}			1		kΩ

Marking

Marking	BN