

SMD Type

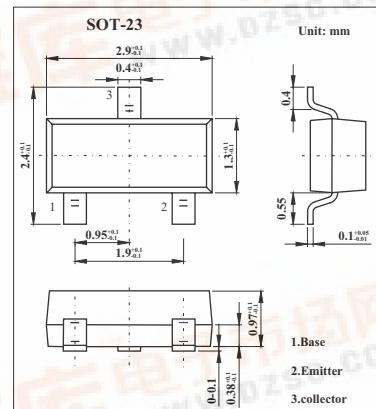
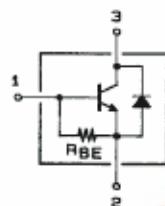
Transistors

NPN Epitaxial Planar Silicon Transistor

2SD2324

■ Features

- Low saturation voltage.
- Contains a diode between collector 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°C

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 _{CCEO}	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
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

■ Electrical Characteristics Ta = 25°C

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
Diode forward voltage	V _F	I _F = 0.5A			1.5	V
Base-emitter resistance	R _{BE}			1		kΩ

■ Marking

Marking	BN
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