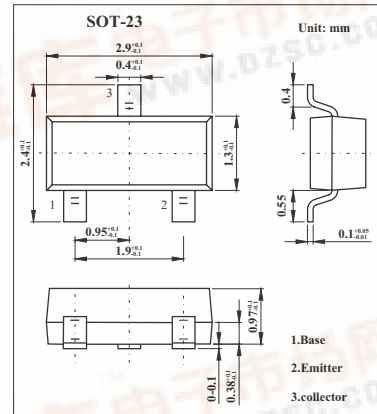


SMD Type Transistors

Silicon NPN Epitaxial Planar Type
2SD1328



Features

- Low ON resistance Ron.
- Low collector-emitter saturation voltage VCE(sat).
- High forward current transfer ratio hFE.

Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	25	V
Collector-emitter voltage	V _{CEO}	20	V
Emitter-base voltage	V _{EB0}	12	V
Collector current	I _c	1	A
Peak collector current	I _{CP}	0.5	A
Collector power 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 _{CB0}	V _{CB} = 25 V, I _E = 0			100	nA
Collector-base voltage	V _{CB0}	I _c = 10 μA, I _E = 0	25			V
Collector-emitter voltage	V _{CEO}	I _c = 1 mA, I _B = 0	20			V
Emitter-base voltage	V _{EB0}	I _E = 10 μA, I _c = 0	12			V
Forward current transfer ratio	h _{FE}	V _{CE} = 2 V, I _c = 0.5 A	200		800	
Collector-emitter saturation voltage	V _{CE(sat)}	I _c = 0.5 A, I _B = 20 mA		0.13	0.4	V
Base-emitter saturation voltage	V _{BE(sat)}	I _c = 0.5 A, I _B = 50 mA			1.2	V
Transition frequency	f _T	V _{CB} = 10 V, I _E = -50 mA, f = 200 MHz		200		MHz
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f = 1.0MHz		10		pF
ON resistance	R _{on}	 $R_{on} = \frac{V_{ce} - V_{ce(sat)}}{I_c} \times 1000(\Omega)$		1.0		Ω

hFE Classification

Marking	1D		
Rank	R	S	T
hFE	200~350	300~500	400~800

