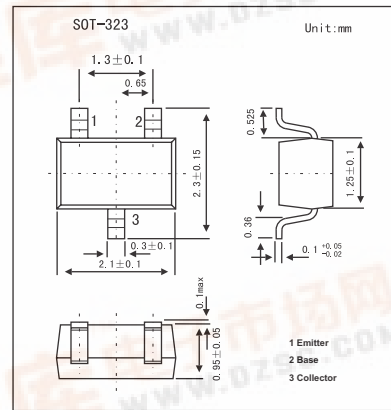


SMD Type Transistors

Silicon NPN Epitaxial
2SC4118

Features

- Excellent hFE linearity : hFE (2) = 25 (min) (VCE = 6 V, IC = 400 mA)



Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	35	V
Collector-emitter voltage	V _{CE0}	30	V
Emitter-base voltage	V _{EB0}	5	V
Collector current	I _C	500	mA
Base current	I _B	50	mA
Collector power dissipation	P _C	100	mW
Junction temperature	T _J	125	°C
Storage temperature	T _{stg}	-55 to +125	°C

Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} = 35 V, I _E = 0			0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = 5 V, I _C = 0			0.1	μA
DC current gain	h _{FE}	V _{CE} = 1 V, I _C = 100 mA	70		240	
		V _{CE} = 6 V, I _C = 400 mA	25			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = 100 mA, I _B = 10 mA		0.1	0.25	V
Base-emitter voltage	V _{BE}	V _{CE} = 1 V, I _C = 100 mA		0.8	1.0	V
Transition frequency	f _T	V _{CE} = 6 V, I _C = 20 mA		300		MHz
Collector output capacitance	C _{ob}	V _{CB} = 6 V, I _E = 0, f = 1 MHz		7		pF

hFE Classification

Marking	WO	WY
hFE	70~140	120~240

