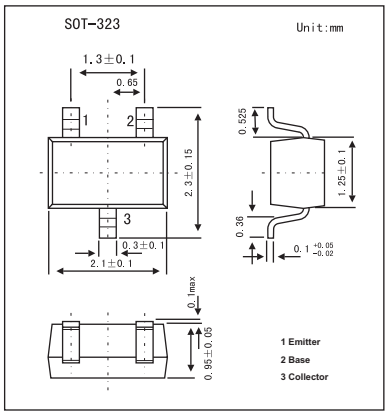
TY Semicondutor®

Product specification

2SC4102



■ Features

- High breakdown voltage.(V_{CEO} = 120V)

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	120	V
Collector-emitter voltage	V_{CEO}	120	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	50	mA
Collector power dissipation	P_C	0.2	W
Junction temperature	Tj	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	I_C=50μA	120			V
Collector-emitter breakdown voltage	V_{CEO}	I_C=1mA	120			V
Emitter-base breakdown voltage	V_{EBO}	I_E=50μA	5			V
Collector cutoff current	I_{CBO}	V_{CB}=100V			0.5	μA
Emitter cutoff current	I_{EBO}	V_{EB}=4V			0.5	μA
DC current transfer ratio	h_{FE}	V_{CE}=6V, I_C=2mA	180		560	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=10mA, I_B=1mA			0.5	V
Output capacitance	C_{ob}	V_{CB}=12V, I_E=0A, f=1MHz		2.5		pF
Transition frequency	f_T	V_{CE}=-12V, I_E= 2mA, f=100MHz		140		MHz

■ h_{FE} Classification

Marking	TR	TS
Rank	R	S
hFE	180～390	270～560