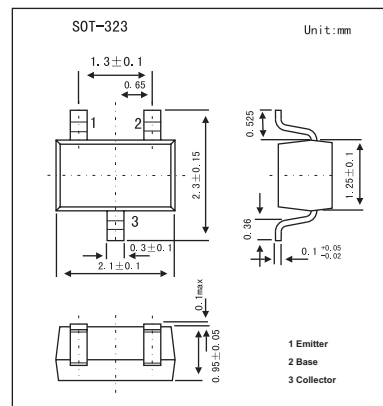


2PC4081

■ Features

- High current (max. 100 mA)
- Low voltage (max. 40 V)



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	50	V
Collector-emitter voltage	V _{CEO}	40	V
Emitter-base voltage	V _{EB0}	5	V
Collector current	I _C	100	mA
Peak collector current	I _{CM}	200	mA
Peak base current	I _{BM}	200	mA
Total power dissipation *	P _{tot}	200	mW
Storage temperature	T _{stg}	-65 to +150	°C
Junction temperature	T _j	150	°C
Operating ambient temperature	T _{amb}	-65 to +150	°C
Thermal resistance from junction to ambient	R _{th j-a}	625	K/W

* Transistor mounted on an FR4 printed-circuit board.

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cut-off current	I _{CBO}	I _E = 0; V _{CB} = 30 V			100	nA
		I _E = 0; V _{CB} = 30 V; T _j = 150 °C			5	μA
Emitter cut-off current	I _{EB0}	I _C = 0; V _{EB} = 4 V			100	nA
DC current gain 2PC4081Q 2PC4081R 2PC4081S	h _{FE}	I _C = 1 mA; V _{CE} = 6 V	120		270	
			180		390	
			270		560	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = 50 mA; I _B = 5 mA; *			400	mV
Collector capacitance	C _c	I _E = I _{ce} = 0; V _{CB} = 12 V; f = 1 MHz		2	3.5	pF
Transition frequency	f _T	I _C = 2 mA; V _{CE} = 12 V; f = 100 MHz	100			MHz

* Pulse test: t_p ≤ 300 μs; δ ≤ 0.02.

■ hFE Classification

TYPE	2PC4081Q	2PC4081R	2PC4081S
Marking	ZQ	ZR	ZS