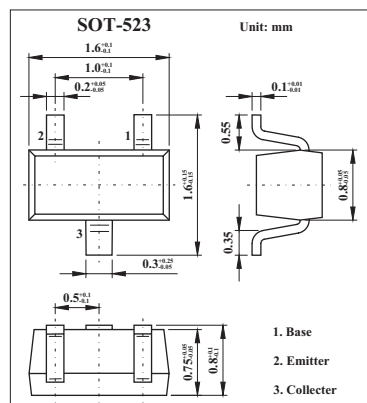


KC857T(BC857T)

■ Features

- Low current (max. 100 mA)
- Low voltage (max. 45 V).



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	-50	V
Collector-emitter voltage	V _{CEO}	-45	V
Emitter-base voltage	V _{EBO}	-5	V
Collector current (DC)	I _C	-100	mA
Peak collector current	I _{CM}	-200	mA
power dissipation	P _D	150	mW
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-65 to +150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
collector cut-off current	I _{CBO}	I _E = 0; V _{CB} = -30 V			-15	nA
		I _E = 0; V _{CB} = -30 V; T _j = 150°C			-5	μA
emitter cut-off current	I _{EBO}	I _C = 0; V _{EB} = -5 V			-100	nA
DC current gain	KC857AT	I _C = -2 mA; V _{CE} = -5 V	125		250	
	KC857BT		220		475	
	KC857CT		420		800	
collector-emitter saturation voltage	V _{CEsat}	I _C = -10 mA; I _B = -0.5 mA			-200	mV
		I _C = -100 mA; I _B = -5 mA; *			-400	mV
base-emitter voltage	V _{BE}	I _C = -2 mA; V _{CE} = -5 V	-600		-750	mV
		I _C = -10 mA; V _{CE} = -5 V			-820	mV
collector capacitance	C _c	I _E = I _E = 0; V _{CB} = -10 V; f = 1 MHz			2.5	pF
emitter capacitance	C _e	I _C = I _C = 0; V _{EB} = -500 mV; f = 1 MHz		10		pF
noise figure	F	I _C = -200 μA; V _{CE} = -5 V; R _s = 2 kΩ; f = 1 kHz; B = 200 Hz			10	dB
transition frequency	f _T	I _C = -10 mA; V _{CE} = -5 V; f = 100 MHz	100			MHz

* Pulse test: t_p ≤ 300 ms; δ ≤ 0.02.

■ Marking

NO.	KC857AT	KC857BT	KC857CT
Marking	3E	3F	3G