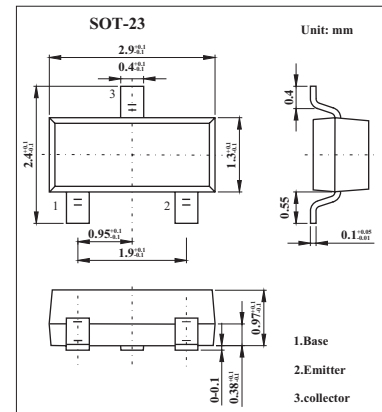


PNP Transistor

KC856A,B/KC857A,B,C/KC858A,B,C
(BC856A,B/BC857A,B,C/BC858A,B,C)

■ Features

- Ideally suited for automatic insertion
- For Switching and AF Amplifier Applications

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter		Symbol	Rating	Unit
Collector-Base Voltage	KC856	V _{CB0}	-80	V
	KC857		-50	
	KC858		-30	
Collector-Emitter Voltage	KC856	V _{CEO}	-65	V
	KC857		-45	
	KC858		-30	
Emitter-Base Voltage		V _{EB0}	-5	V
Collector Current -Continuous		I _C	-0.1	A
Collector Power Dissipation		P _C	200	mW
Junction Temperature		T _J	150	°C
Storage Temperature		T _{stg}	-65 to +150	°C

KC856A,B/KC857A,B,C/KC858A,B,C (BC856A,B/BC857A,B,C/BC858A,B,C)

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	KC856 KC857 KC858	V_{CB0} $I_C = -10\mu\text{A}$, $I_E = 0$	-80			V
			-50			
			-30			
Collector-emitter breakdown voltage	KC856 KC857 KC858	V_{CE0} $I_C = -10\text{ mA}$, $I_B = 0$	-65			V
			-45			
			-30			
Emitter-base breakdown voltage	V_{EB0}	$I_E = -10\mu\text{A}$, $I_C = 0$	-5			V
Collector cut-off current	KC856 KC857 KC858	$V_{CB} = -70\text{ V}$, $I_E = 0$			-0.1	$\mu\text{ A}$
		$V_{CB} = -45\text{ V}$, $I_E = 0$				
		$V_{CB} = -25\text{ V}$, $I_E = 0$				
Collector cut-off current	KC856 KC857 KC858	$V_{CE} = -60\text{ V}$, $I_B = 0$			-0.1	$\mu\text{ A}$
		$V_{CE} = -40\text{ V}$, $I_B = 0$				
		$V_{CE} = -25\text{ V}$, $I_B = 0$				
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{ V}$, $I_C = 0$			-0.1	$\mu\text{ A}$
DC current gain	KC856A, 857A, 858A KC856B, 857B, 858B KC857C, KC858C	h_{FE} $V_{CE} = -5\text{V}$, $I_C = -2\text{mA}$	120		250	
			220		475	
			420		800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100\text{mA}$, $I_B = -5\text{ mA}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -100\text{ mA}$, $I_B = -5\text{mA}$			-1.1	V
Collector capacitance	C_{ob}	$V_{CB} = -10\text{V}$, $f = 1\text{MHz}$			4.5	pF
Transition frequency	f_T	$V_{CE} = -5\text{ V}$, $I_C = -10\text{mA}$, $f = 100\text{MHz}$	100			MHz

■ Marking

NO.	KC856A	KC856B
Marking	3A	3B

NO.	KC857A	KC857B	KC857C
Marking	3E	3F	3G

NO.	KC858A	KC858B	KC858C
Marking	3J	3K	3L

KC856A,B/KC857A,B,C/KC858A,B,C (BC856A,B/BC857A,B,C/BC858A,B,C)

■ Typical Characteristics

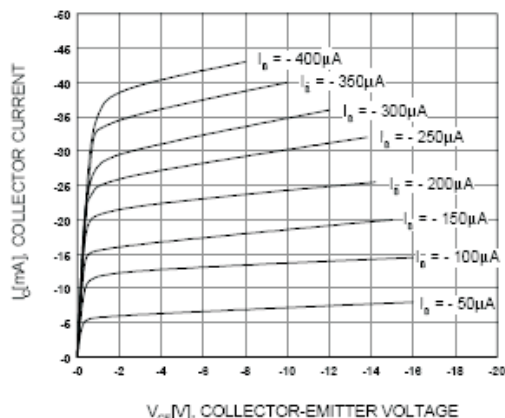


Fig.1 Static Characteristic

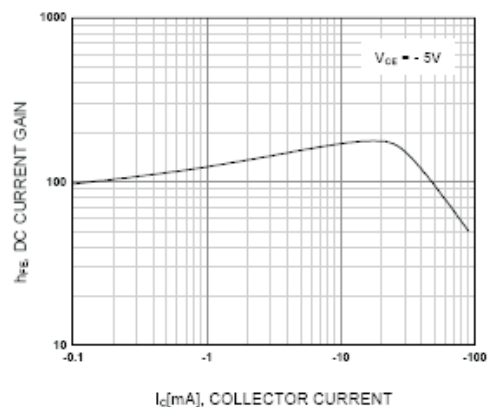


Fig.2 DC Current Gain

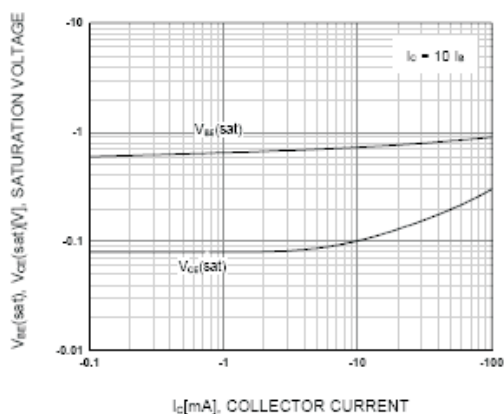
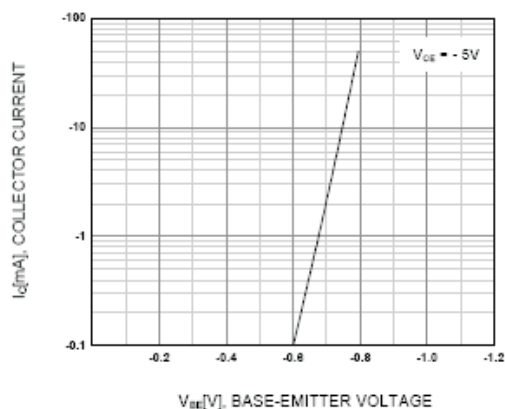
Fig.3 Base Emitter Saturation Voltage
Collector Emitter Saturation Voltage

Fig.4 Base Emitter ON Voltage

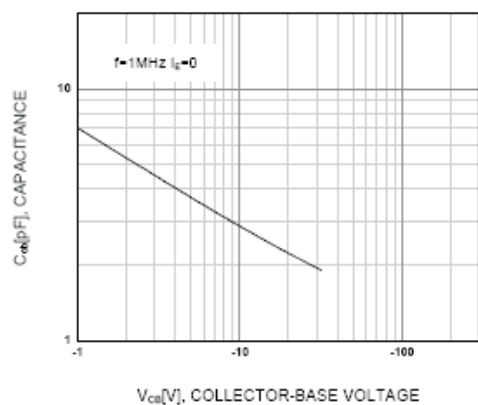


Fig.5 Collector Output Capacitance

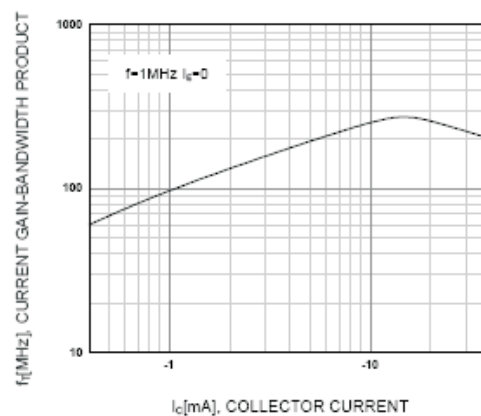


Fig.6 Current Gain Bandwidth Product