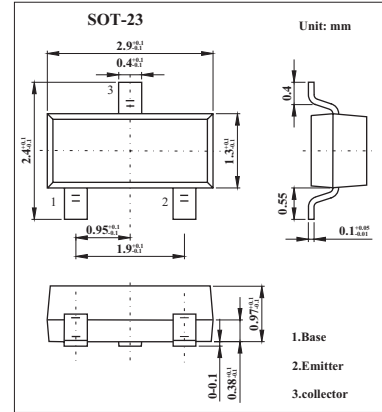


KC856A,B/KC857A,B,C/KC858A,B,C (BC856A,B/BC857A,B,C/BC858A,B,C)

■ Features

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



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	KC856	-80	V
	KC857	-50	
	KC858	-30	
Collector-Emitter Voltage	KC856	-65	V
	KC857	-45	
	KC858	-30	
Emitter-Base Voltage	VEBO	-5	V
Collector Current -Continuous	IC	-0.1	A
Collector Power Dissipation	PC	200	mW
Junction Temperature	TJ	150	°C
Storage Temperature	Tstg	-65 to +150	°C

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

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit	
Collector-base breakdown voltage	KC856	$I_c = -10\mu A, I_E = 0$	-80			V	
	KC857		-50				
	KC858		-30				
Collector-emitter breakdown voltage	KC856	$I_c = -10\text{ mA}, I_B = 0$	-65			V	
	KC857		-45				
	KC858		-30				
Emitter-base breakdown voltage	VEBO	$I_E = -10\mu A, I_C = 0$	-5			V	
Collector cut-off current	KC856	ICBO	$V_{CB} = -70\text{ V}, I_E = 0$			-0.1	$\mu\text{ A}$
	KC857		$V_{CB} = -45\text{ V}, I_E = 0$				
	KC858		$V_{CB} = -25\text{ V}, I_E = 0$				
Collector cut-off current	KC856	ICEO	$V_{CE} = -60\text{ V}, I_B = 0$			-0.1	$\mu\text{ A}$
	KC857		$V_{CE} = -40\text{ V}, I_B = 0$				
	KC858		$V_{CE} = -25\text{ V}, I_B = 0$				
Emitter cut-off current	IEBO	$V_{EB} = -5\text{ V}, I_C = 0$			-0.1	$\mu\text{ A}$	
DC current gain	KC856A, 857A,858A	hFE	$V_{CE} = -5\text{V}, I_c = -2\text{mA}$	120		250	
	KC856B, 857B,858B			220		475	
	KC857C,KC858C			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	Cob	$V_{CB} = -10\text{V}, f = 1\text{MHz}$			4.5	pF	
Transition frequency	ft	$V_{CE} = -5\text{ V}, I_C = -10\text{mA}, f = 100\text{MHz}$	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

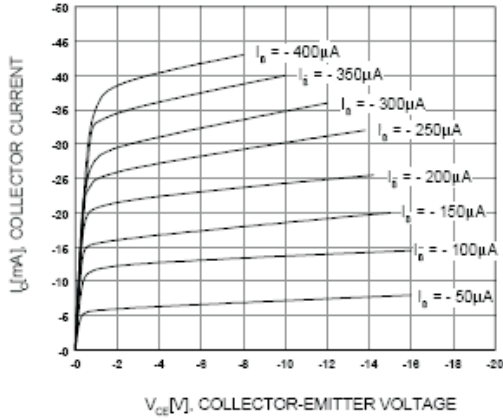


Fig.1 Static Characteristic

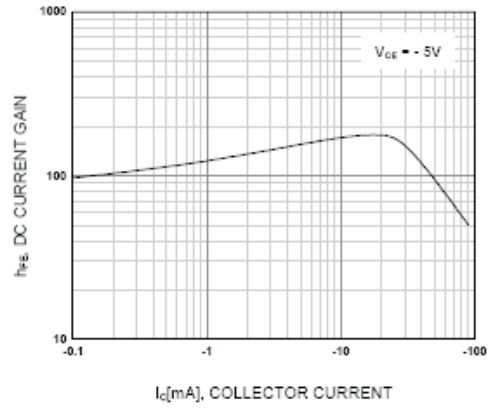


Fig.2 DC Current Gain

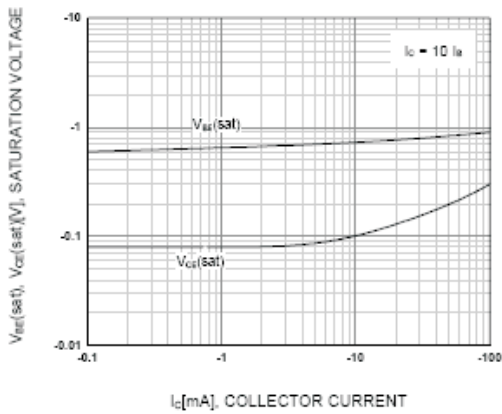


Fig.3 Base Emitter Saturation Voltage
Collector Emitter Saturation Voltage

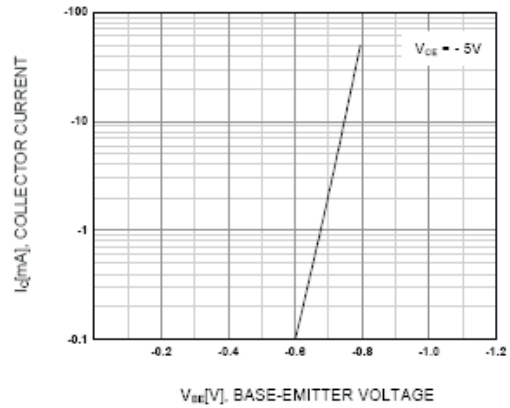


Fig.4 Base Emitter ON Voltage

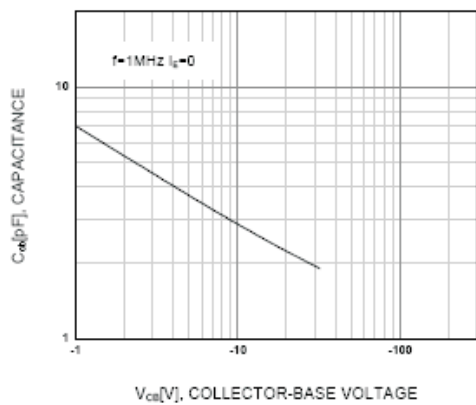


Fig.5 Collector Output Capacitance

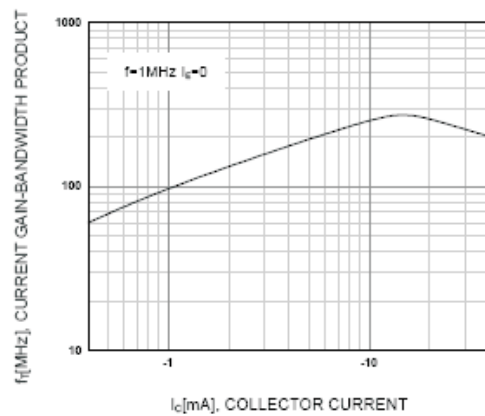


Fig.6 Current Gain Bandwidth Product