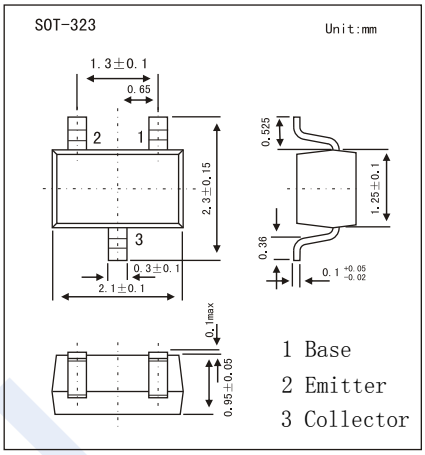
NPN Transistors
2SC5342UF



■ Features

- ●Large collector current : Ic=500mA
- ● Low collector saturation voltage enabling low-voltage operation
- ● Complementary to 2SA1979UF

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	40	V
Collector - Emitter Voltage	V_{CEO}	32	
Emitter - Base Voltage	V_{EBO}	5	
Collector Current - Continuous	I_C	500	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= 100 μA, I_E= 0	40			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= 1 mA, I_B= 0	32			
Emitter - base breakdown voltage	V_{EBO}	I_E= 100 μ A, I_C= 0	5			
Collector-base cut-off current	I_{CBO}	V_{CB}= 40V , I_E= 0			0.1	uA
Emitter cut-off current	I_{EBO}	V_{EB}= 5V , I_C=0			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=100mA, I_B=10mA			0.25	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=100mA, I_B=10mA			1.2	
DC current gain	h_{FE}	V_{CE}= 1V, I_C= 100mA	70		240	
Collector output capacitance	C_{ob}	V_{CB}=6V, I_E=0, f=1MHz		7		pF
Transition frequency	f_T	V_{CE}= 6V, I_E= -20mA		300		MHz

■ Classification of h_{fe}

Type	2SC5342UF-O	2SC5342UF-Y
Range	70-140	120-240
Marking	BO	BY

NPN Transistors

2SC5342UF

■ Typical Characterisitics

Fig. 1 Pc - Ta

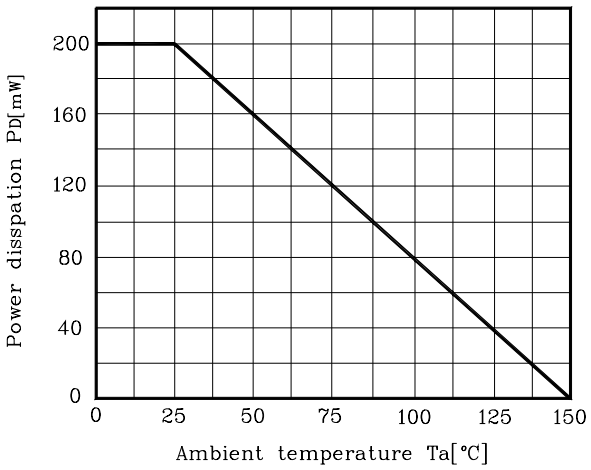


Fig. 2 I_E - V

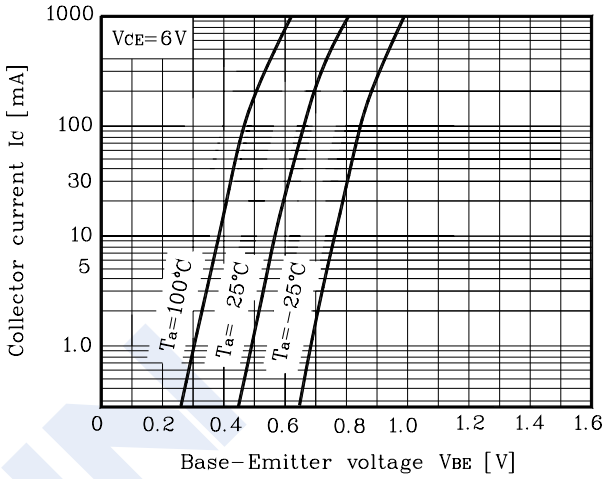


Fig. 3 I_C - V_{CE}

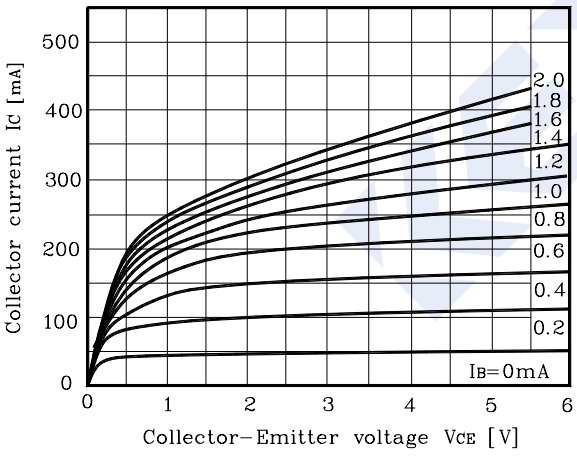


Fig. 4 $V_{CE(SAT)}$ - I_C

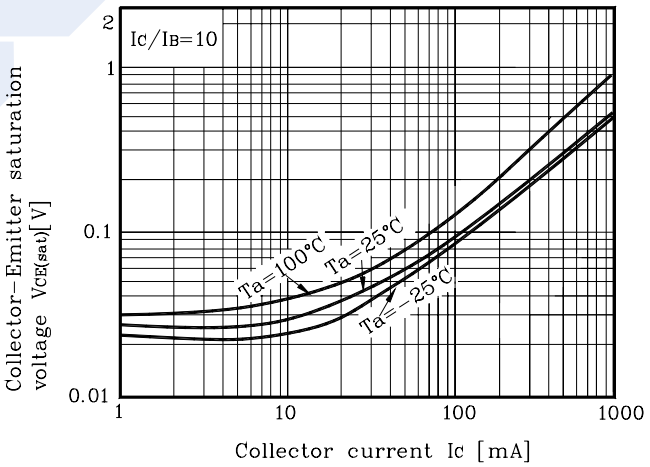


Fig. 5 h_{FE} - I_C

