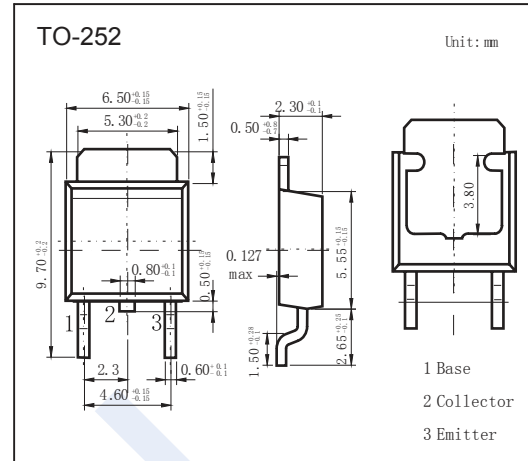


PNP Transistors

2SB935

■ Features

- Low collector to emitter saturation voltage $V_{CE(sat)}$
- High-speed switching



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

Parameter	Symbol	Rating	Unit	
Collector - Base Voltage	V_{CBO}	-40	V	
Collector - Emitter Voltage	V_{CEO}	-20		
Emitter - Base Voltage	V_{EBO}	-5		
Collector Current - Continuous	I_C	-10	A	
Collector current - Pulse	I_{CP}	-15		
Collector Power Dissipation	P_C	$T_c = 25^\circ\text{C}$	35	W
		$T_a = 25^\circ\text{C}$	1.3	
Junction Temperature	T_J	150	$^\circ\text{C}$	
Storage Temperature range	T_{stg}	-55 to 150		

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C = -100 \mu\text{A}$, $I_E = 0$	-40			V
Collector-emitter breakdown voltage	V_{CEO}	$I_C = -10 \text{ mA}$, $I_B = 0$	-20			
Emitter - base breakdown voltage	V_{EBO}	$I_E = -100 \mu\text{A}$, $I_C = 0$	-5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -40\text{V}$, $I_E = 0$			-50	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}$, $I_C = 0$			-50	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -7 \text{ A}$, $I_B = -230 \text{ mA}$			-0.6	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -7 \text{ A}$, $I_B = -230 \text{ mA}$			-1.5	
DC current gain	$h_{FE(1)}$	$V_{CE} = -2\text{V}$, $I_C = -100 \text{ mA}$	45			
	$h_{FE(2)}$	$V_{CE} = -2\text{V}$, $I_C = -2 \text{ A}$	90		260	
Turn-on time	t_{on}	$I_C = -2 \text{ A}$, $I_{B1} = -66 \text{ mA}$, $I_{B2} = 66 \text{ mA}$		0.1		
Storage time	t_{stg}			0.5		
Fall time	t_f			0.1		
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1 \text{ MHz}$		200		μF
Transition frequency	f_T	$V_{CE} = -10\text{V}$, $I_C = -500 \text{ mA}$, $f = 10 \text{ MHz}$		150		MHz

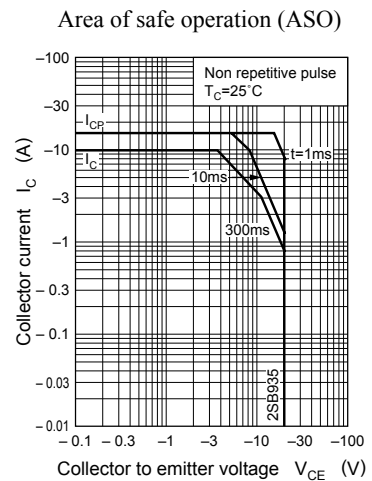
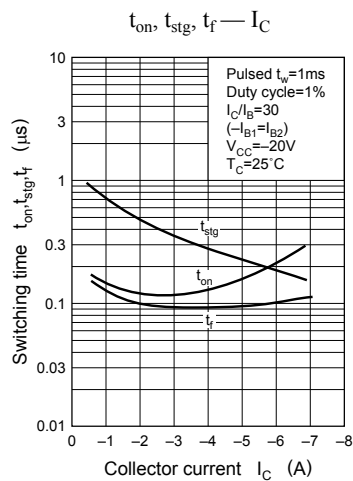
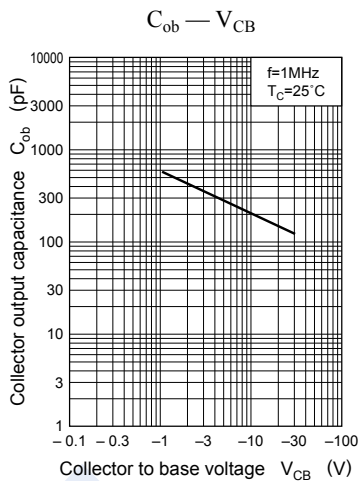
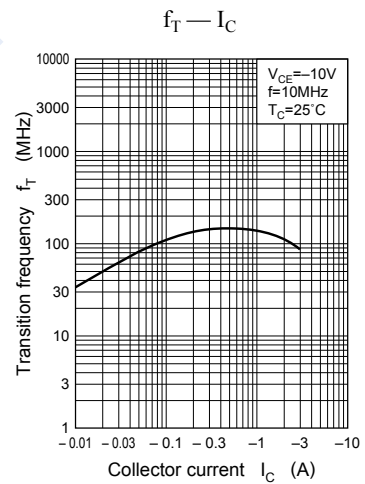
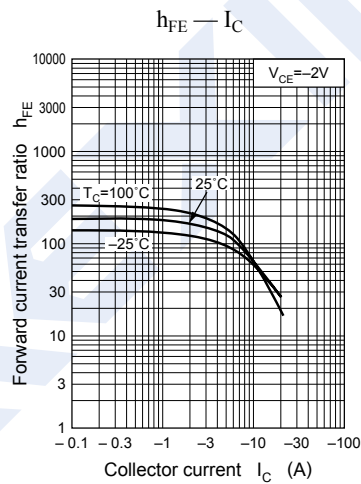
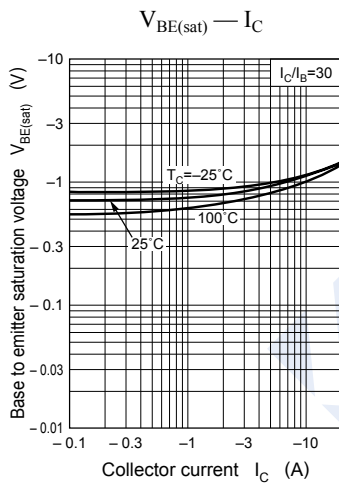
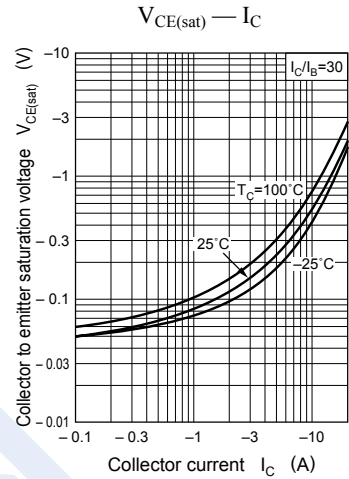
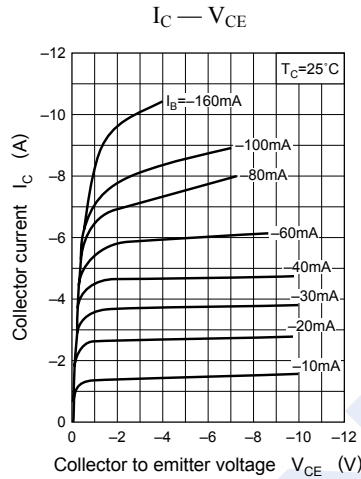
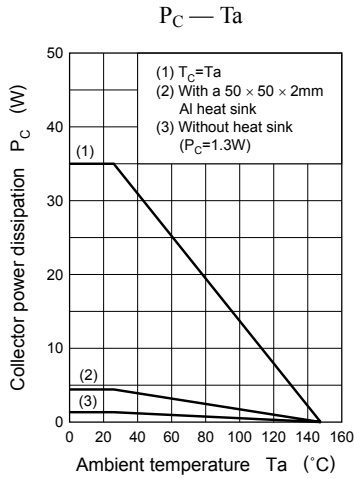
■ Classification of $h_{FE(2)}$

Type	2SB935-Q	2SB935-P
Range	90-180	130-260

PNP Transistors

2SB935

Typical Characteristics



PNP Transistors

2SB935

■ Typical Characteristics

