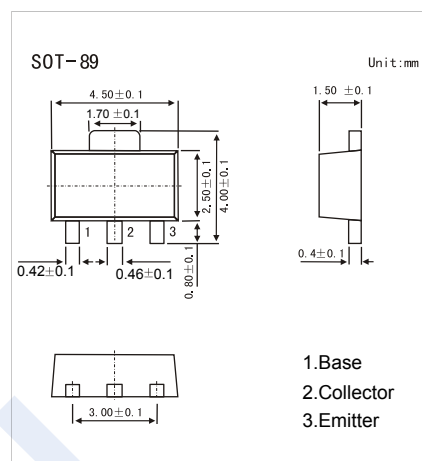


PNP Transistors

2SB1025

■ Features

- Low frequency power amplifier
- Complementary to 2SD1418

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-120	V
Collector - Emitter Voltage	V_{CE0}	-80	
Emitter - Base Voltage	V_{EB0}	-5	
Collector Current - Continuous	I_C	-1	A
Collector current -Pulse (Note.1)	I_{CP}	-2	
Collector Power Dissipation	P_C	1	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

Note.1: $PW \leq 10\text{ms}$, Duty cycle $\leq 20\%$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = -100 \mu\text{A}$, $I_E = 0$	-120			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -1 \text{ mA}$, $R_{BE} = \infty$	-80			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu\text{A}$, $I_C = 0$	-5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -100\text{V}$, $I_E = 0$			-10	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}$, $I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$			-1	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$			-1.2	
Base - emitter voltage	V_{BE}	$V_{CE} = -5\text{V}$, $I_C = -150 \text{ mA}$			-0.9	
DC current gain	h_{FE}	$V_{CE} = -5\text{V}$, $I_C = -150 \text{ mA}$	60		320	
		$V_{CE} = -5\text{V}$, $I_C = -500 \text{ mA}$	30			
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$		20		pF
Transition frequency	f_T	$V_{CE} = -5\text{V}$, $I_C = -150\text{mA}$		140		MHz

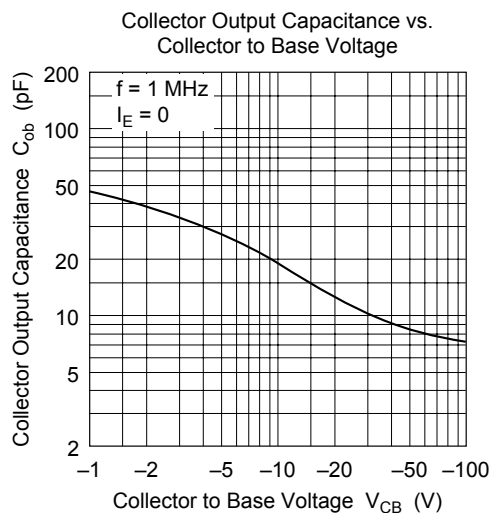
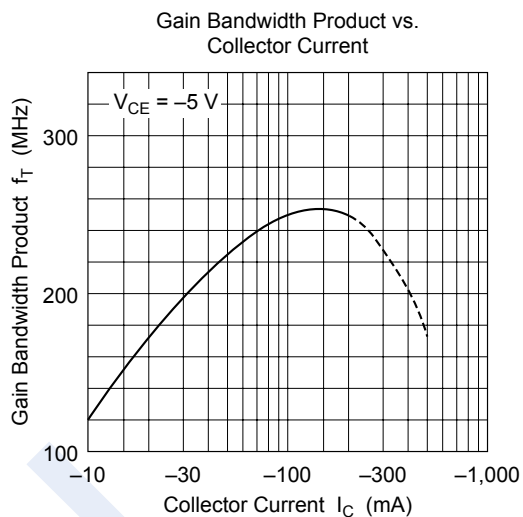
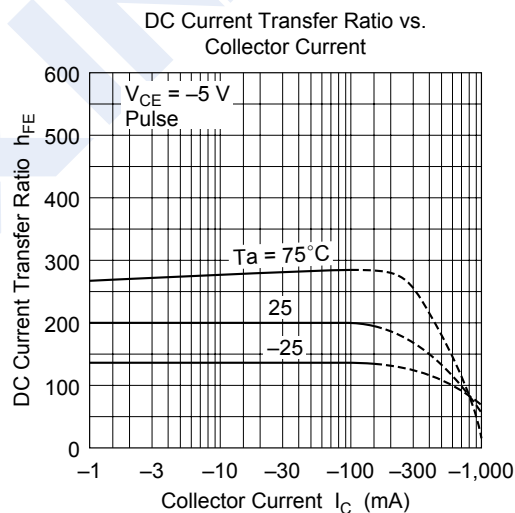
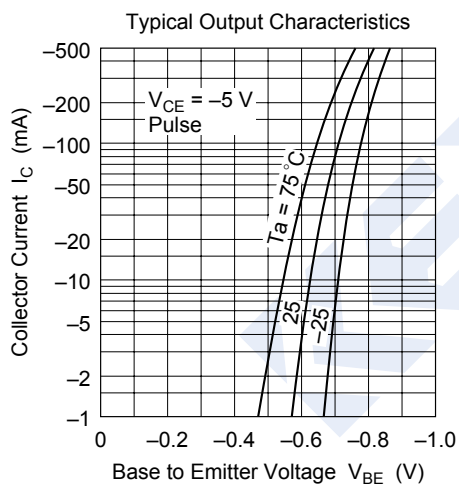
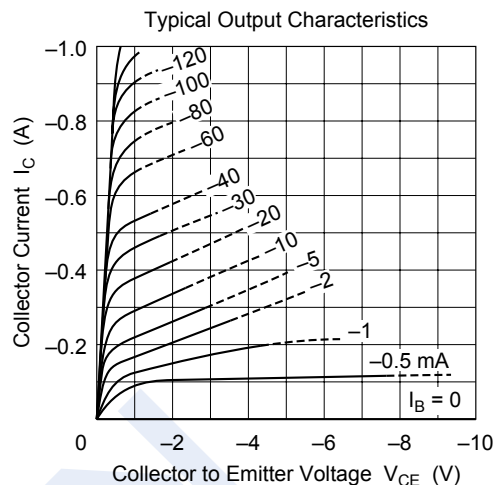
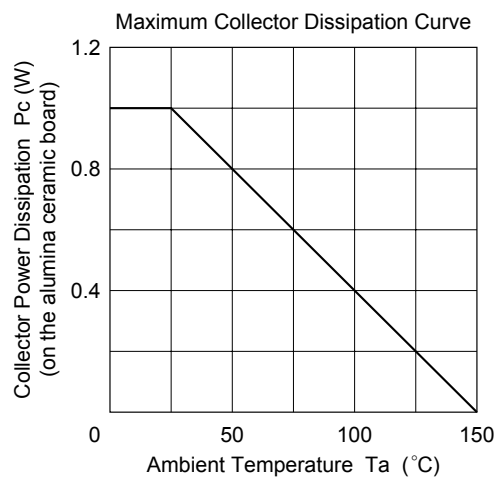
■ Classification of $h_{FE}(1)$

Type	2SB1025-H	2SB1025-J	2SB1025-K
Range	60-120	100-200	160-320
Marking	DH	DJ	DK

PNP Transistors

2SB1025

■ Typical Characteristics



PNP Transistors

2SB1025

■ Typical Characteristics

