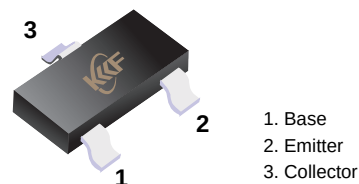


2SA2029

PNP Transistors

Features

- Excellent h_{FE} linearity



■ Simplified outline(SOT-723)

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

Symbol	Parameter	Limit	Unit
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current -Continuous	-150	mA
P_C	Collector Dissipation	150	mW
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^\circ\text{C}$

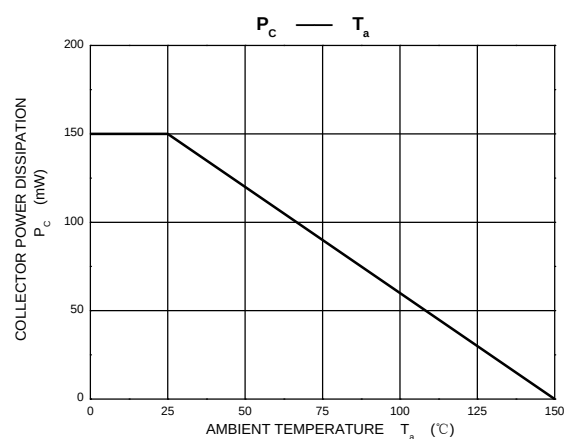
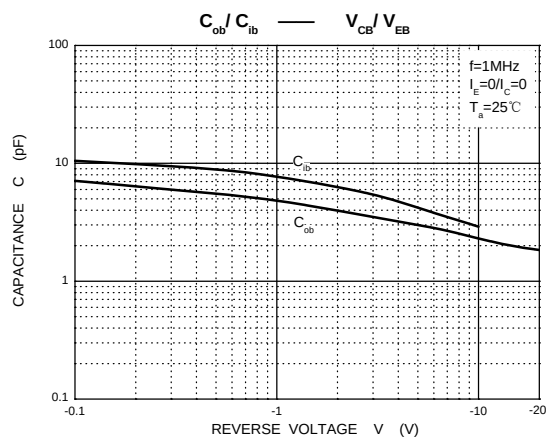
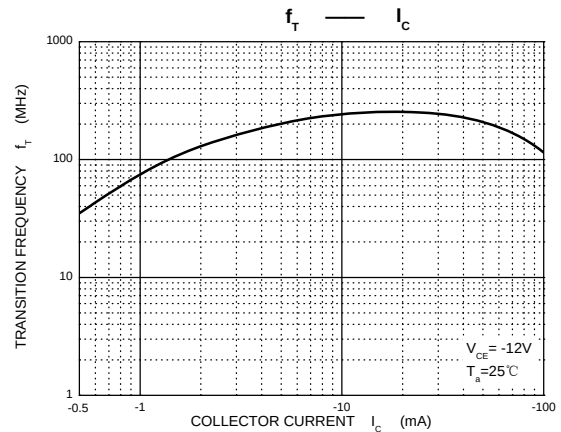
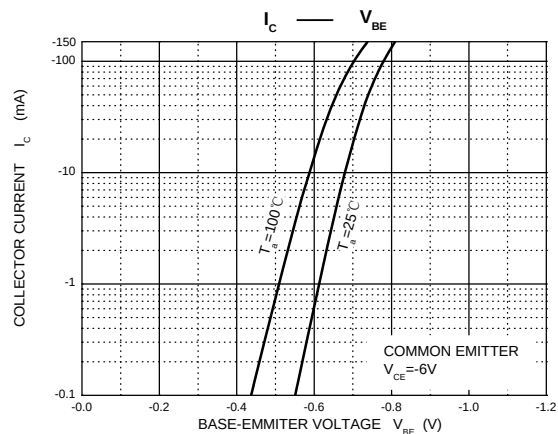
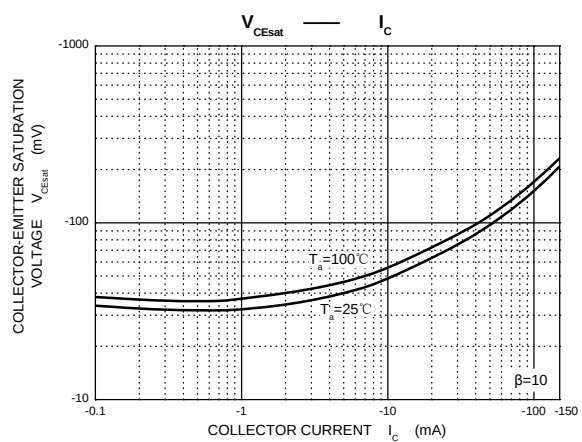
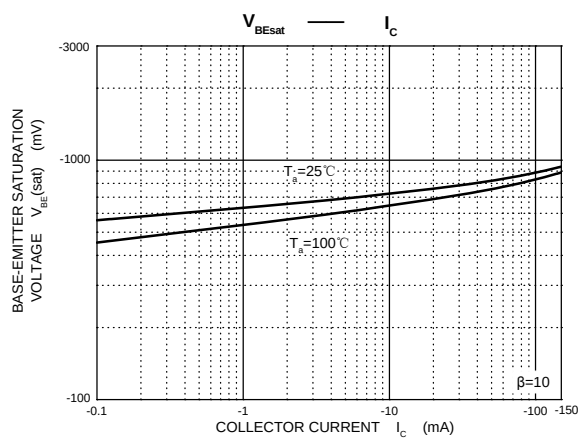
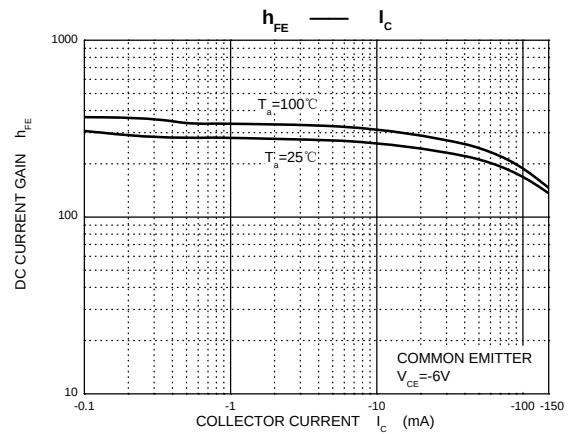
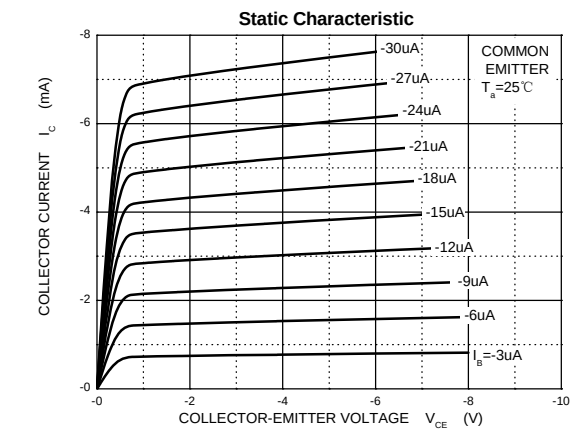
Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -50\mu\text{A}, I_E = 0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, I_B = 0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -50\mu\text{A}, I_C = 0$	-6			V
Collector cut-off current	I_{CBO}	$V_{CB} = -60\text{V}, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -6\text{V}, I_C = 0$			-0.1	μA
DC current transfer ratio	h_{FE}	$V_{CE} = -6\text{V}, I_C = -1\text{mA}$	120		560	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -50\text{mA}, I_B = -5\text{mA}$			-0.5	V
Transition frequency	f_T	$V_{CE} = -12\text{V}, I_C = 2\text{mA}, f = 30\text{MHz}$		140		MHz
Output capacitance	C_{ob}	$V_{CB} = -12\text{V}, I_E = 0, f = 1\text{MHz}$			5	pF

Classification of h_{FE}

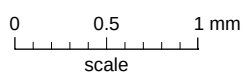
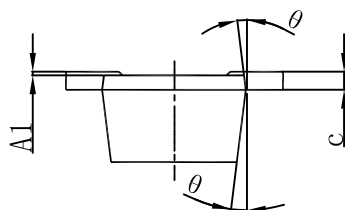
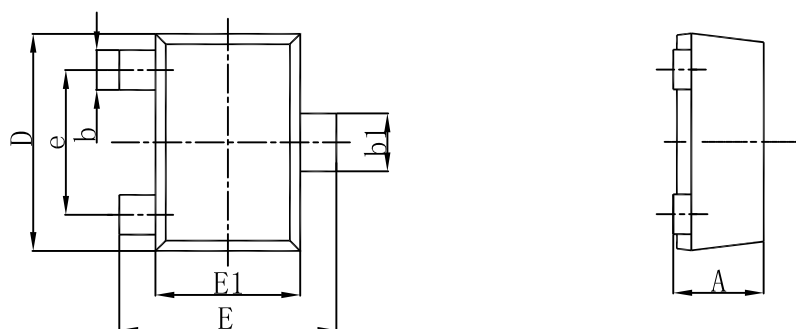
Type	2SA2029-Q	2SA2029-R	2SA2029-S
Range	120-270	180-390	270-560
Marking	FQ	FR	FS

2SA2029



2SA2029

■ SOT-723



DIMENSIONS (mm are the original dimensions)

UNIT	A	A1 max	b	b1	c	D	E	E1
mm	0.43 0.50	0.05	0.17 0.27	0.27 0.37	0.08 0.15	1.15 1.25	0.15 0.25	0.75 0.85