

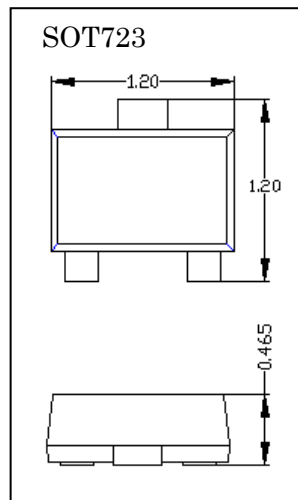
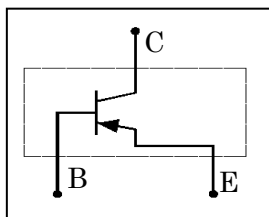
DATA SHEET

2SA2029

- ◇ Small Outline Surface Mount Package
- ◇ RoHS Compliant / Green EMC

Device Marking Code	
2SA2029	FQ, FR, FS

Equivalent Circuit



Maximum Ratings (Ta=25°C)

Symbol	Parameter	Value	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 Power Dissipation	150	mW
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

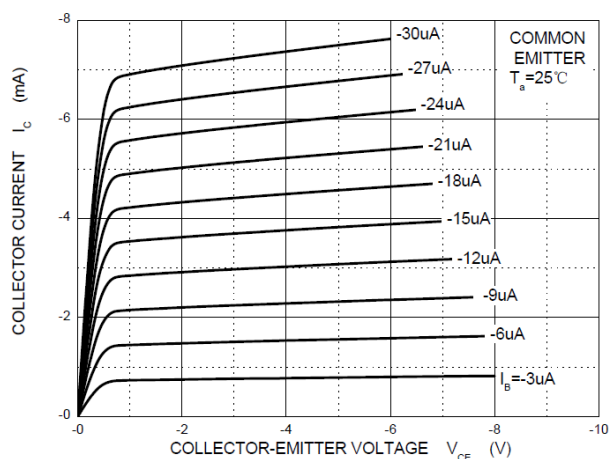
Electrical Characteristics @ 25°C

Symbol	Parameter	Test Conditions	Min	Typ	Max	Units
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -1\text{mA}$, $I_B = 0$	-50			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -50\mu\text{A}$, $I_E = 0$	-60			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -50\mu\text{A}$, $I_C = 0$	-6			V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -60\text{V}$, $I_E = 0$			-0.1	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -6\text{V}$, $I_C = 0$			-0.1	μA
h_{FE}	DC Current Gain	$V_{CE} = -6\text{V}$, $I_C = -1\text{mA}$	120		560	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -50\text{mA}$, $I_B = -5\text{mA}$			-0.5	V
f_T	Transition Frequency	$V_{CE} = -12\text{V}$, $I_C = 2\text{mA}$, $f = 30\text{MHz}$		140		MHz
C_{ob}	Output Capacitance	$V_{CB} = -12\text{V}$, $I_E = 0$, $f = 1\text{MHz}$			5	pF

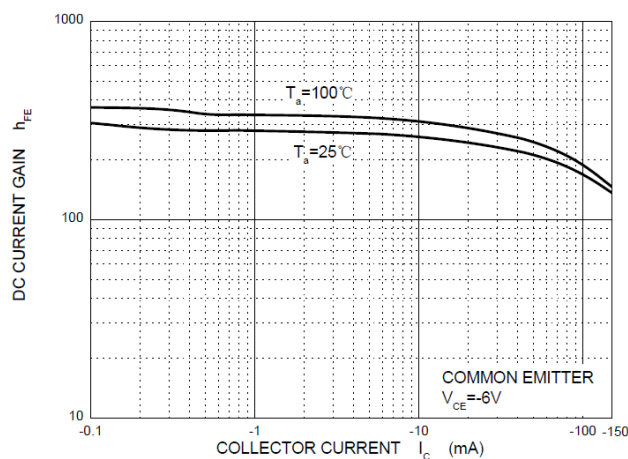
Classification Of h_{FE}

Rank	Q	R	S
Range	120~270	180~390	270~560

Typical Characteristics

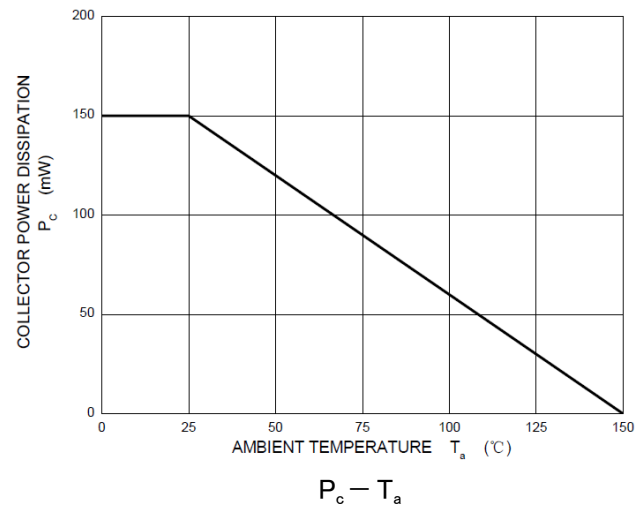
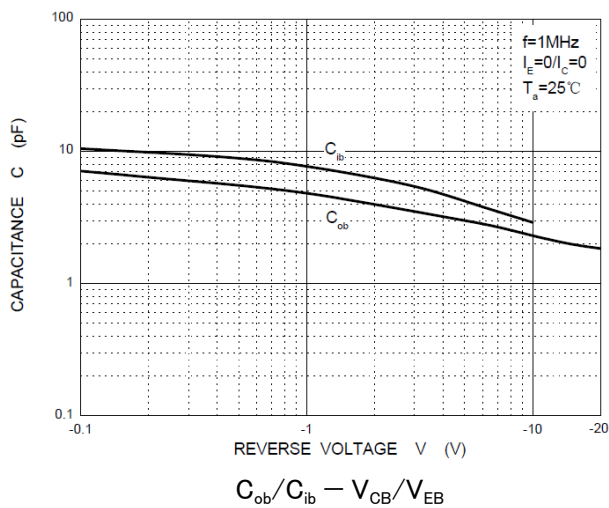
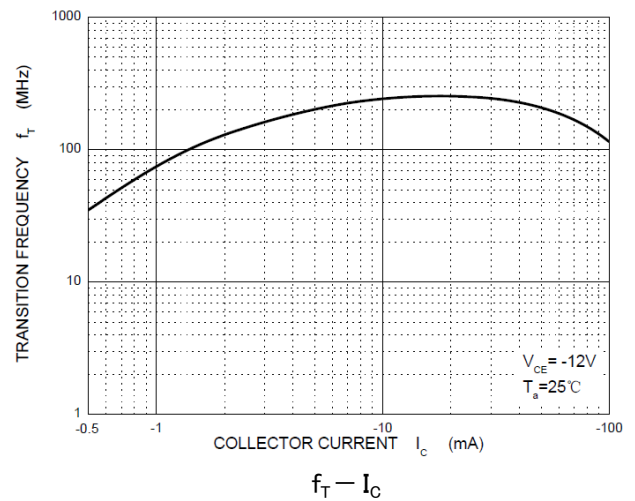
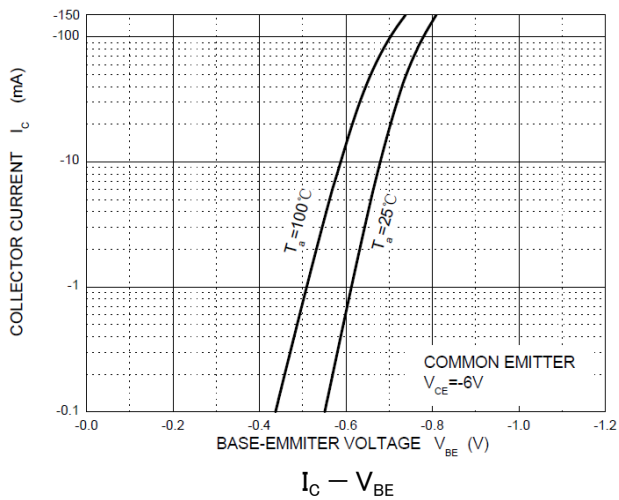
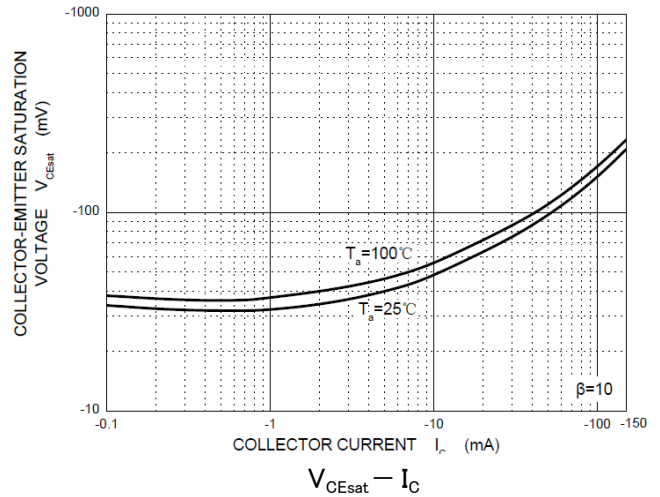
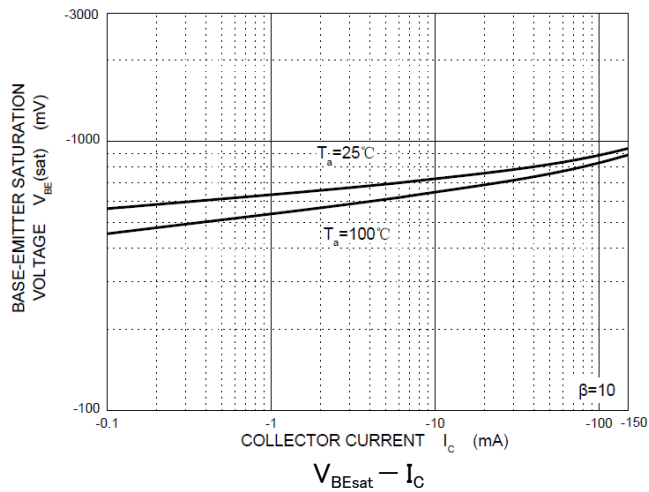


Static Characteristic



$h_{FE} - I_C$

Typical Characteristics



Ordering Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
2SA2029	SOT723	Tape & Reel 8000pcs /7" Reel	8mm	4mm	Conductive	

Package Dimensions

