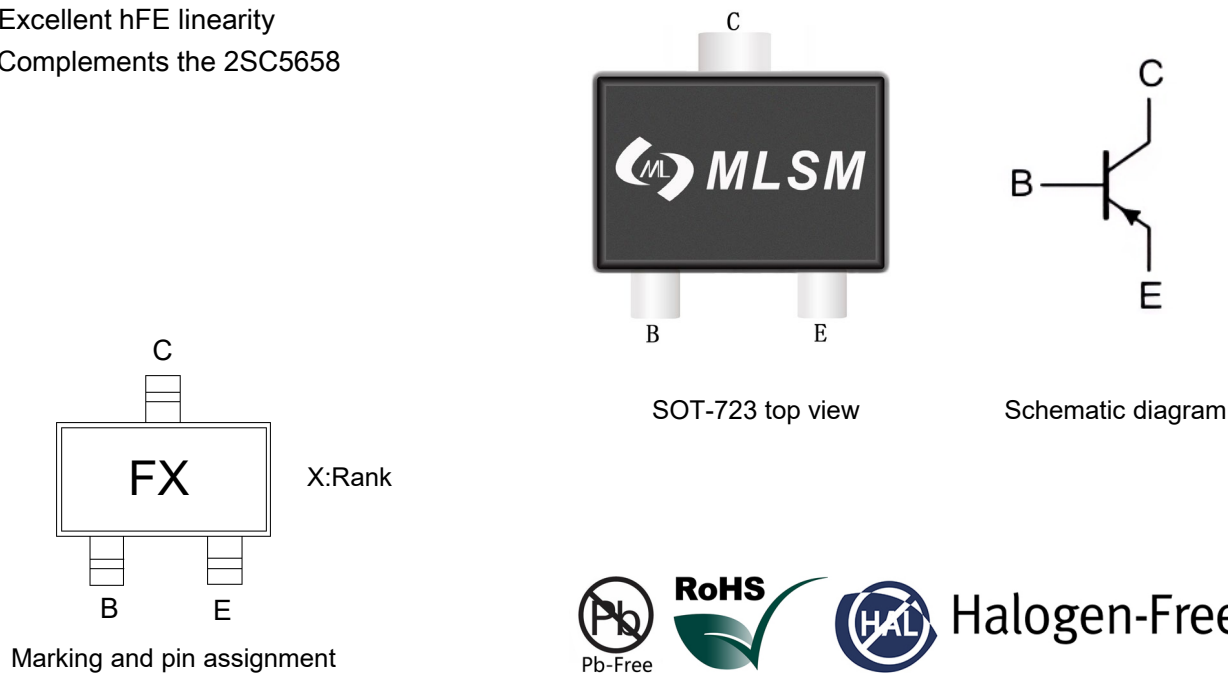


Features

- Excellent hFE linearity
- Complements the 2SC5658



Halogen-Free

Maximum Ratings (Ta=25°C unless otherwise noted)

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	-150	mA
P_C	Collector Power Dissipation	150	mW
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

Ordering Information (Example)

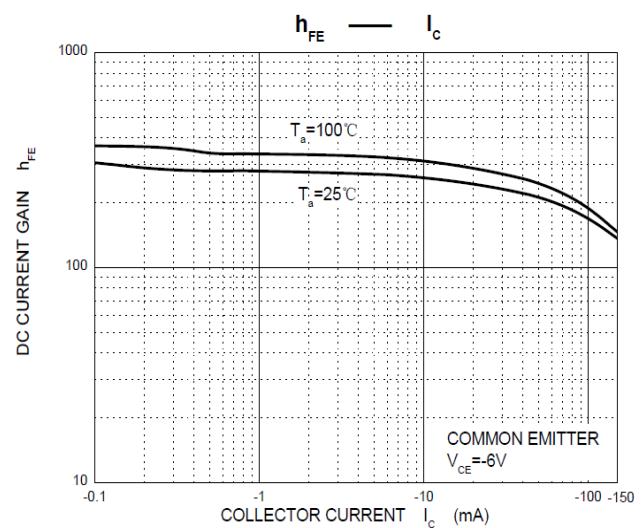
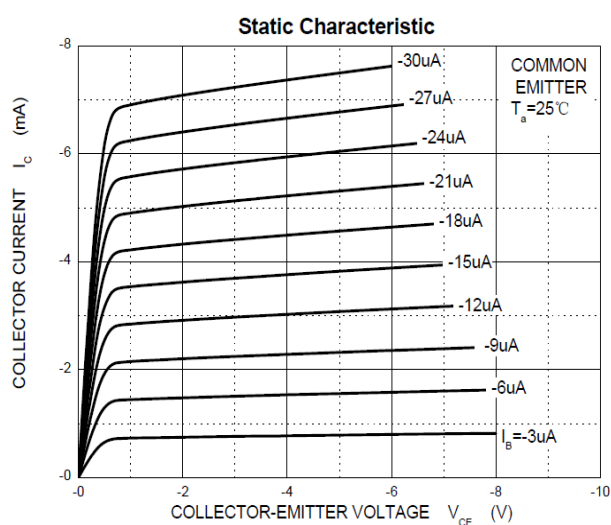
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
2SA2029	SOT-723	FQ/FR/FS	8,000	120,000	480,000	7"reel

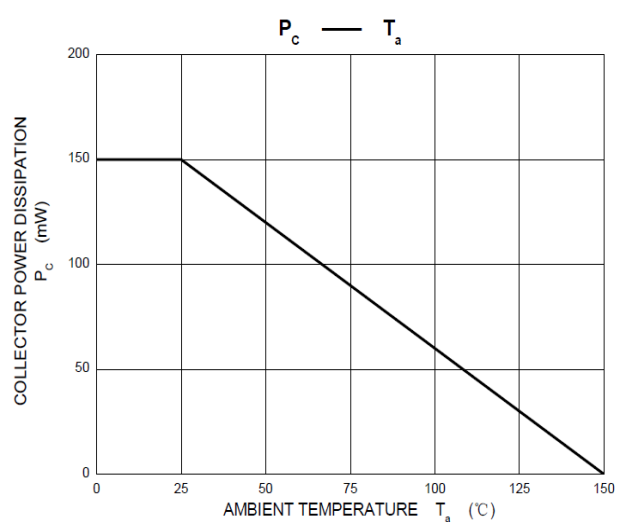
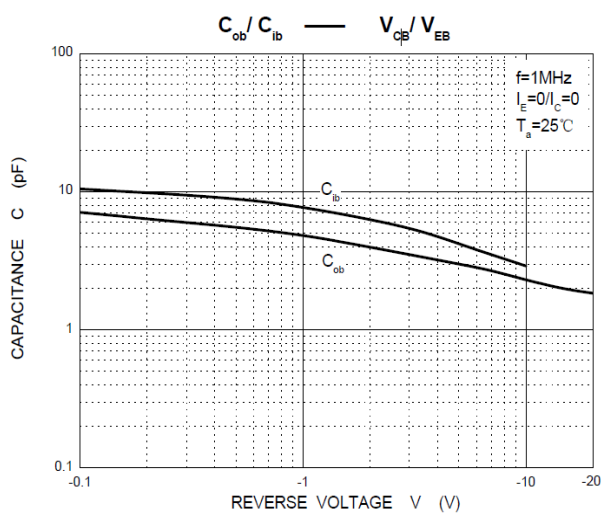
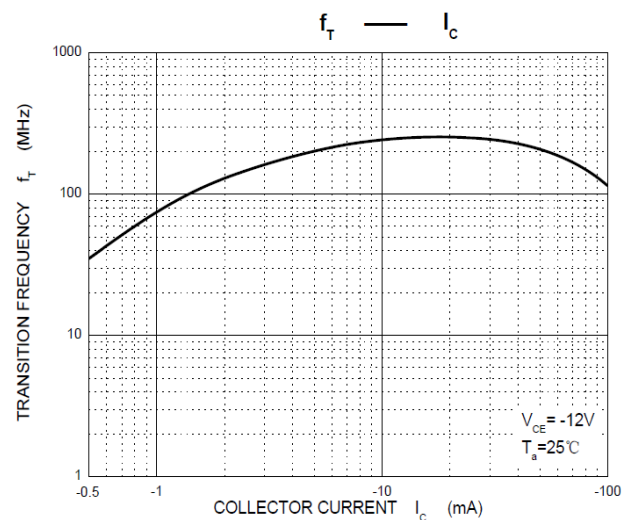
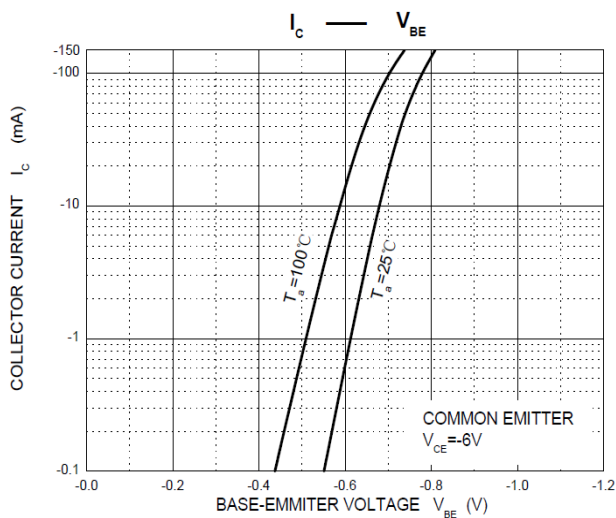
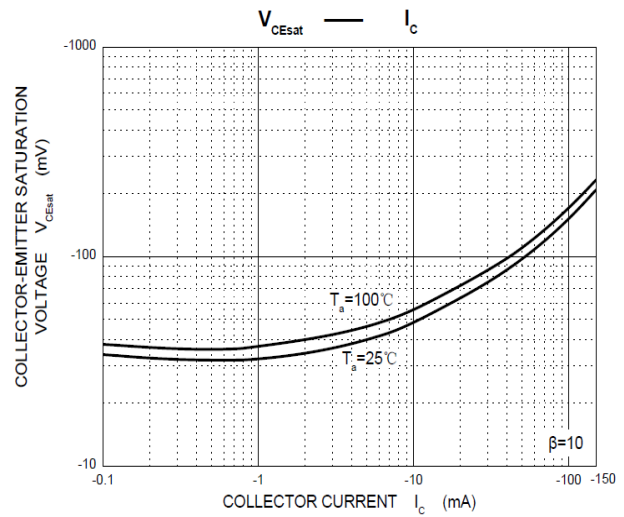
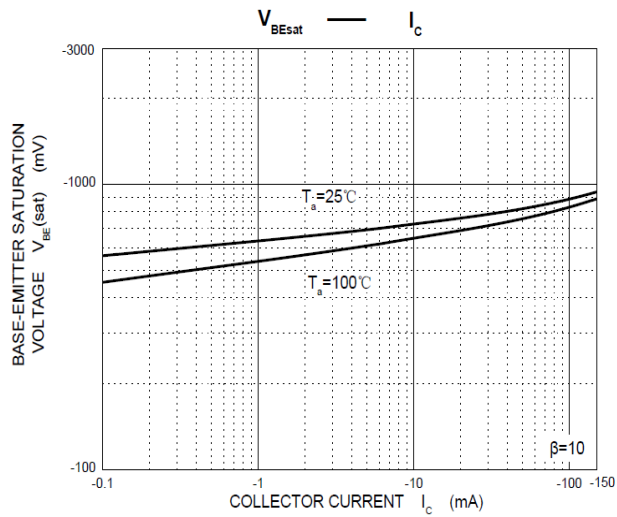
Electrical Characteristics (Ta=25°C unless otherwise specified)

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

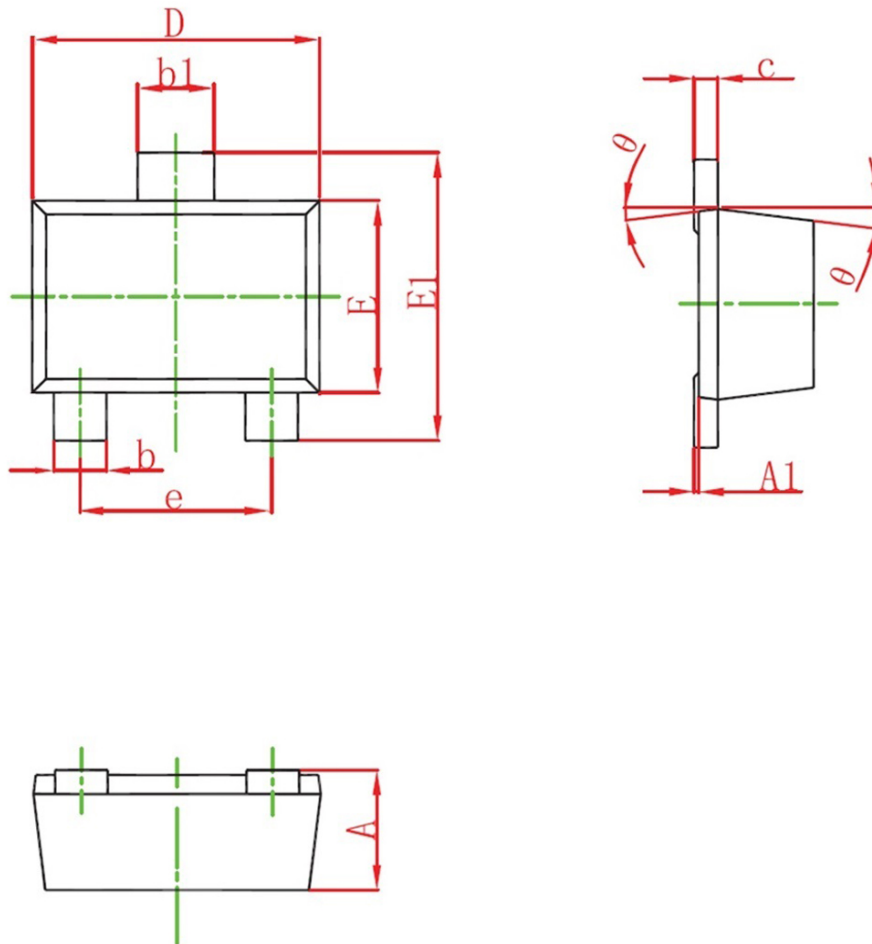
Classification of hFE

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

Typical Operating Characteristics




SOT-723 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.320	0.400	0.012	0.016
A1	0.000	0.050	0.000	0.002
b	0.170	0.270	0.006	0.010
b1	0.270	0.370	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.150	1.250	0.046	0.050
E	0.750	0.850	0.030	0.034
E1	1.150	1.250	0.046	0.050
e	0.800TYP		0.020TYP	
θ	7°REF		7°REF	