

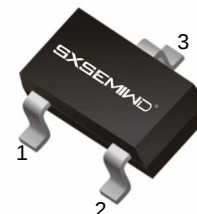
FEATURES

For general amplification

Complementary to 2SD601A

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	-45	V
V _{CEO}	Collector-Emitter Voltage	-45	V
V _{EBO}	Emitter-Base Voltage	-7	V
I _C	Collector Current -Continuous	-100	mA
P _C	Collector Power Dissipation	200	mW
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55-150	°C

SOT-23


1. BASE

2. EMITTER

3. COLLECTOR

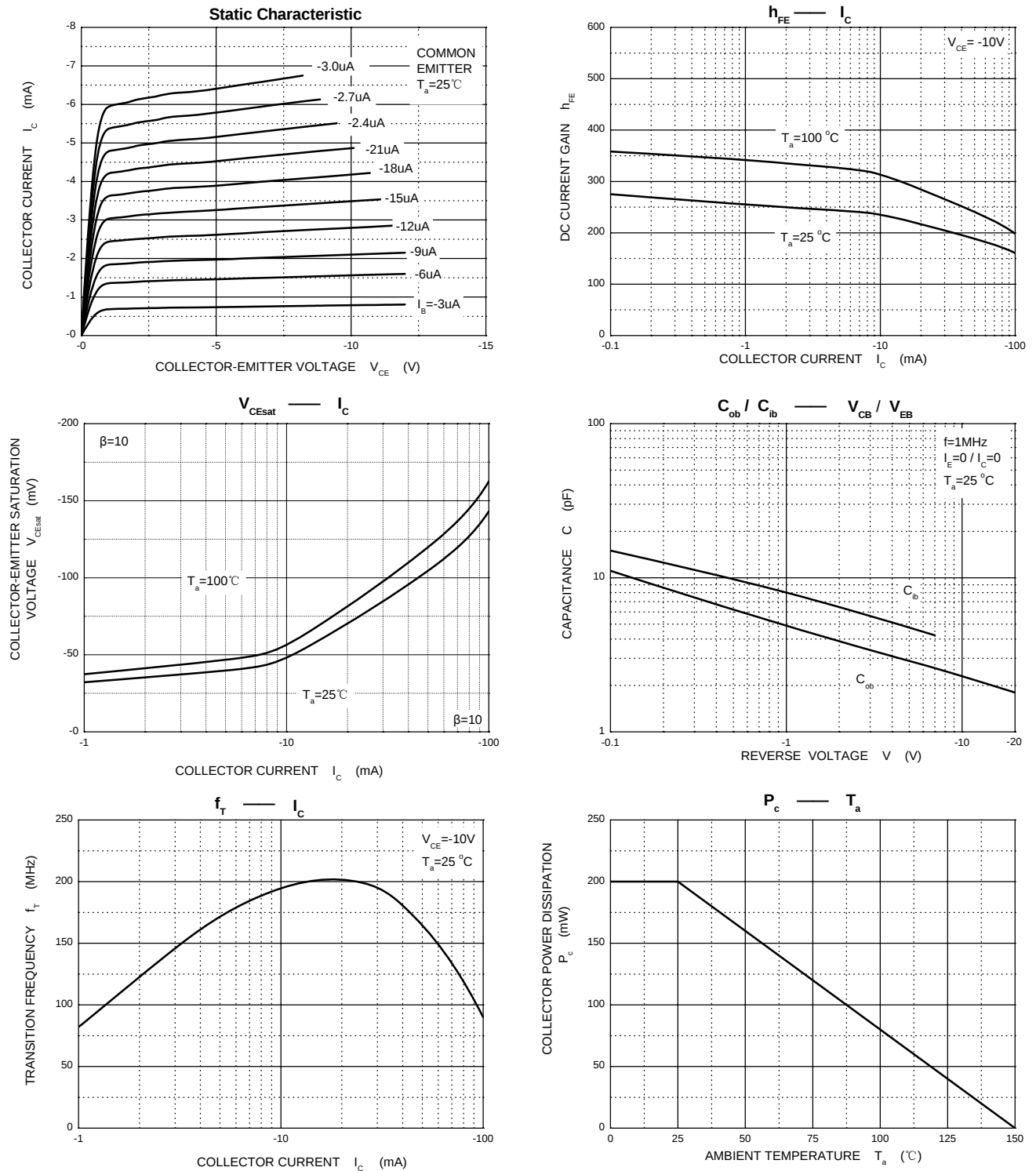
ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = -10 μA, I _E =0	-45		V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = -2mA, I _B =0	-45		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -10 μA, I _C =0	-7		V
Collector cut-off current	I _{CBO}	V _{CB} = -20 V, I _E =0		-0.1	μA
Collector cut-off current	I _{CEO}	V _{CE} = -10V, I _B =0		-100	μA
DC current gain	h _{FE}	V _{CE} = -10V, I _C = -2mA	160	460	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-100 mA, I _B = -10mA		-0.5	V
Transition frequency	f _T	V _{CE} = -10V, I _C = -1mA f=200MHz	60		MHz
Collector output capacitance	C _{ob}	V _{CB} = -10V, I _E = 0 f=1MHz		2.7	pF

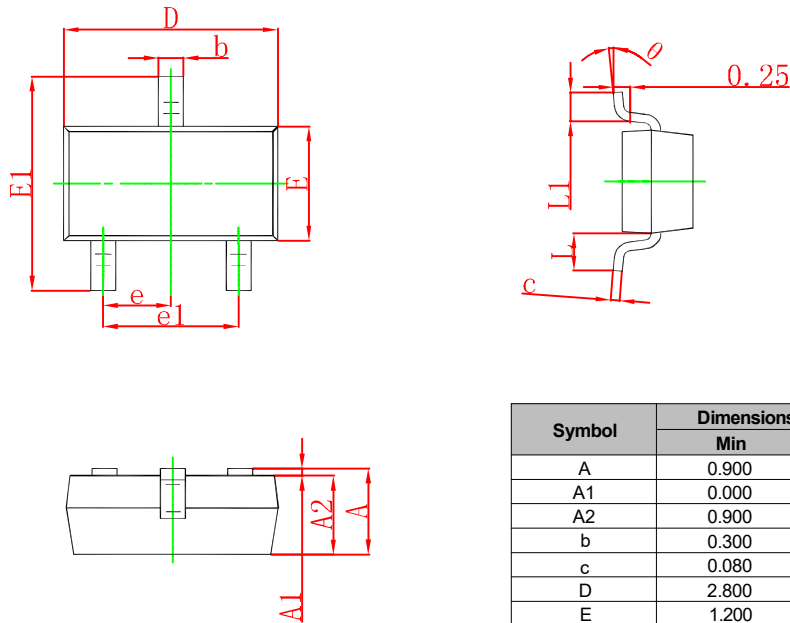
CLASSIFICATION OF h_{FE}

Rank	Q	R	S
Range	160-260	210-340	290-460
Marking	BQ1	BR1	BS1

Typical Characteristics

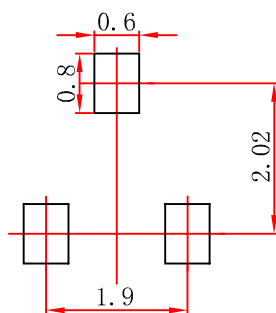


SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.