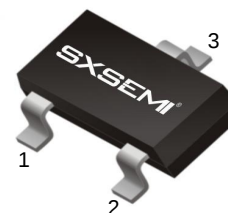


SOT-23


1. BASE
2. EMITTER
3. COLLECTOR

FEATURES

- | Excellent h_{FE} Linearity
: $h_{FE(2)} = 25(\text{Min})$ at $V_{CE} = -6V, I_C = -400mA$.
- | High Voltage : $V_{CEO} = -50V(\text{Min})$
- | Complements to the 2SC3325.

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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-500	mA
P_C	Collector Power Dissipation	200	mW
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

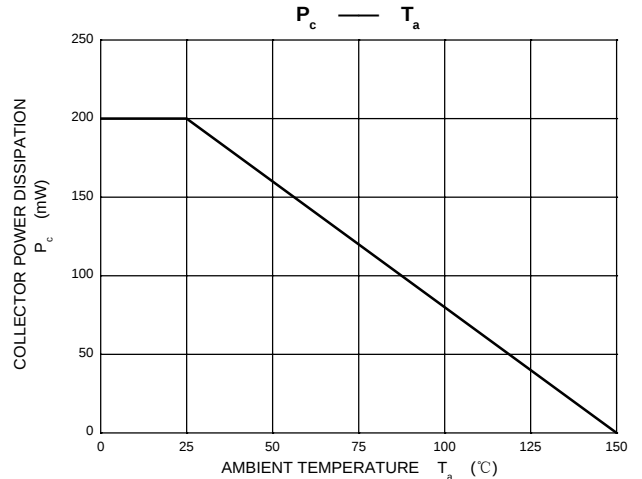
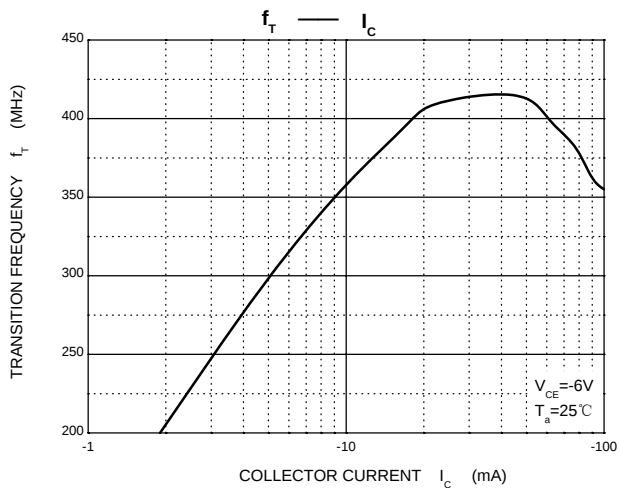
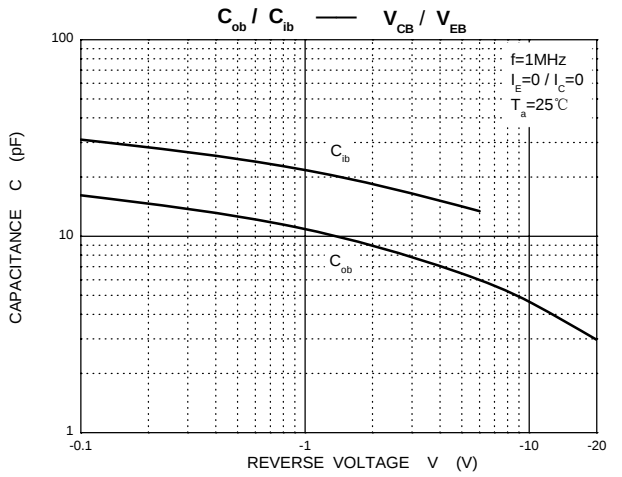
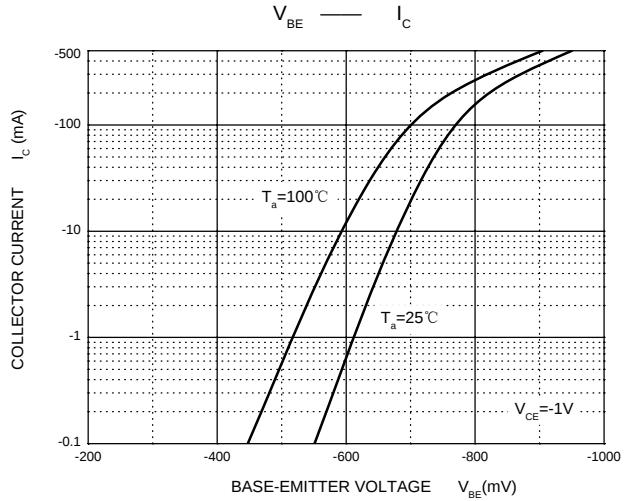
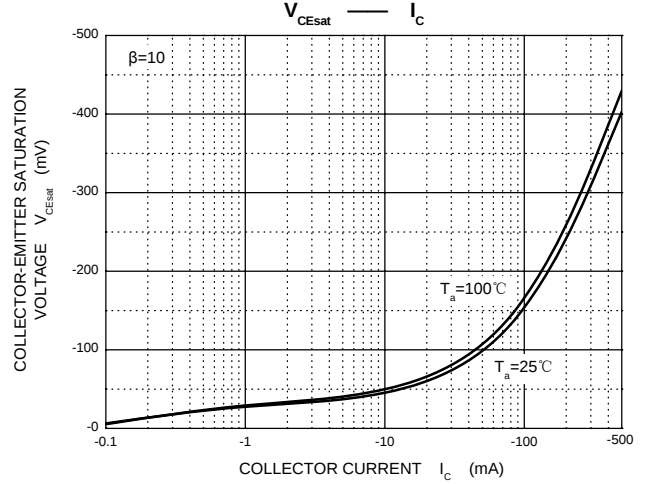
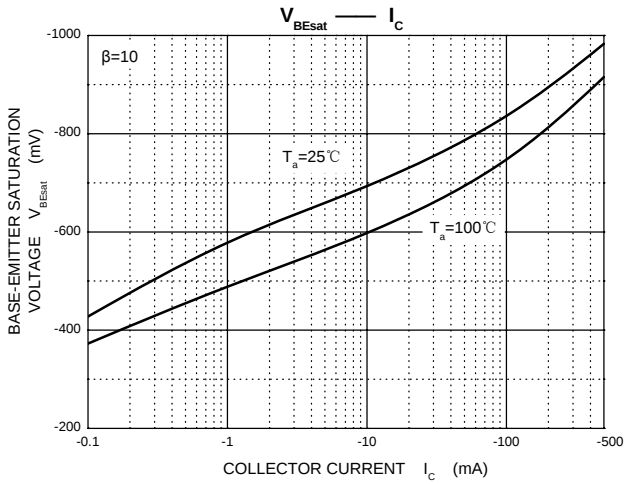
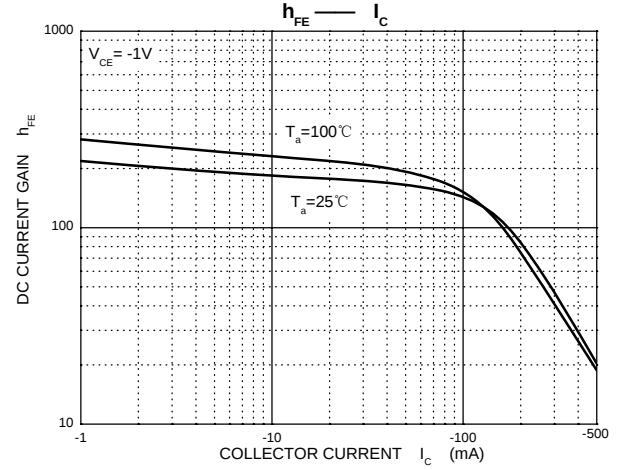
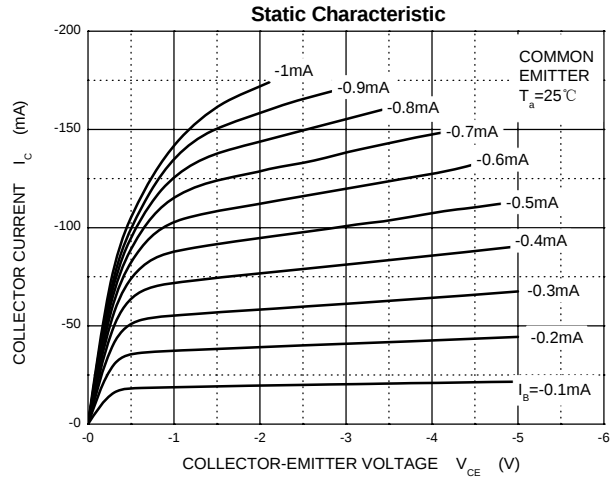
ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -50V, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -1V, I_C = -100mA$	70		240	
	$h_{FE(2)}$	$V_{CE} = -6V, I_C = -400mA$	25			
			40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100mA, I_B = -10mA$			-0.25	V
Base-emitter voltage	V_{BE}	$V_{CE} = -1V, I_C = -100mA$			-1	V
Transition frequency	f_T	$V_{CE} = -6V, I_C = -20mA$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -6V, I_E = 0, f = 1MHz$		13		pF

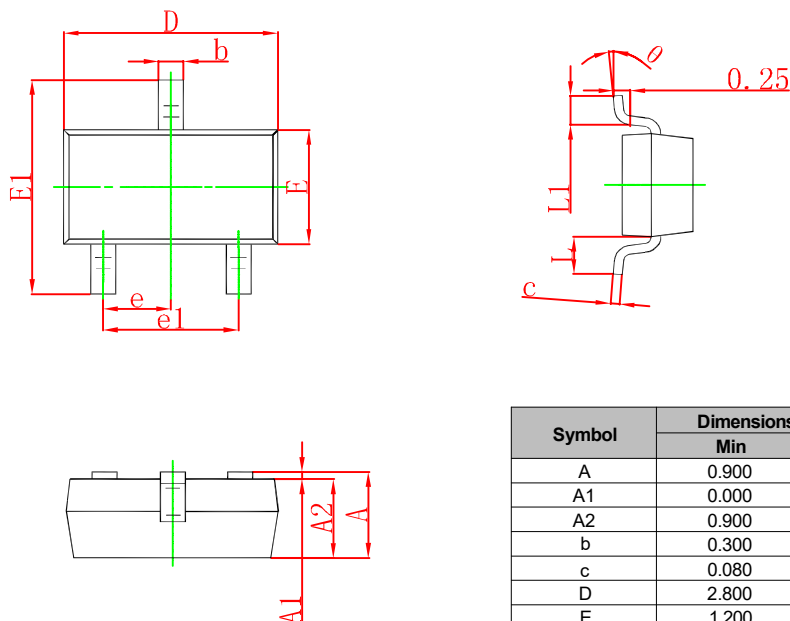
CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	70-140	120-240
Marking	ACO	ACY

Typical Characteristics

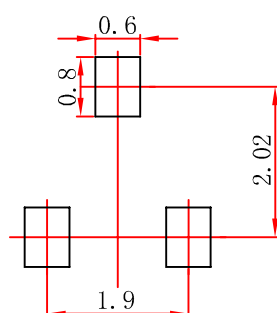


SOT-23 Package Outline Dimensions



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: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.