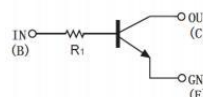


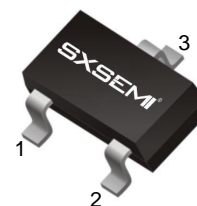
FEATURES

- Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors
- Surface mount package ideally Suited for Automatic Insertion

Equivalent Circuit



SOT-523



MARKING:06

1. IN 2. GND 3. OUT

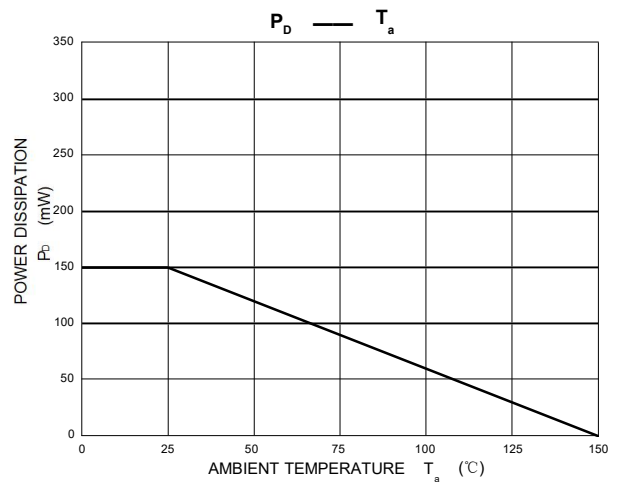
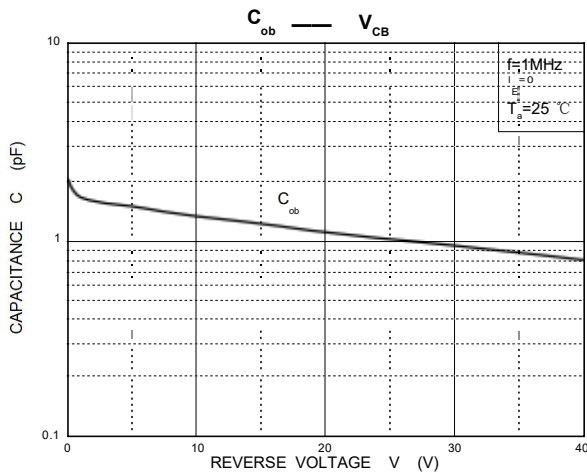
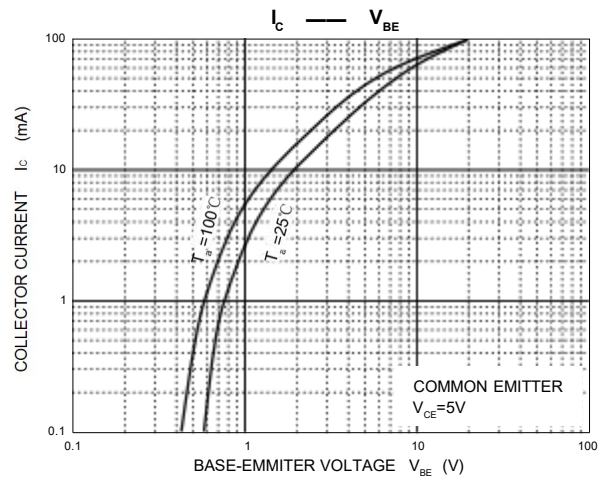
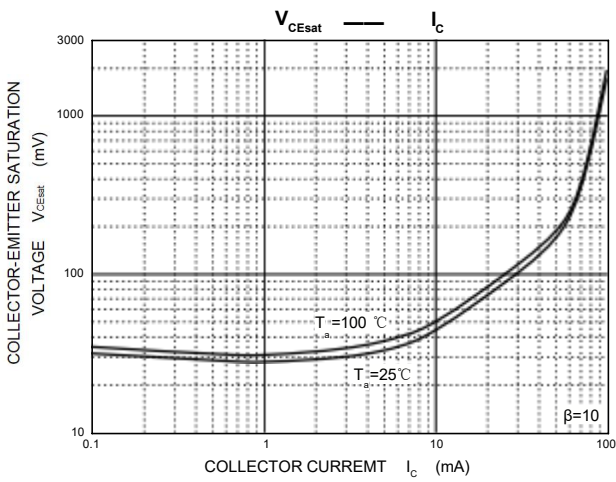
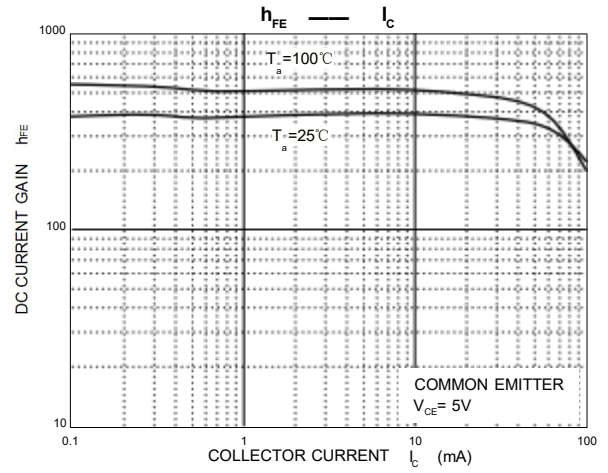
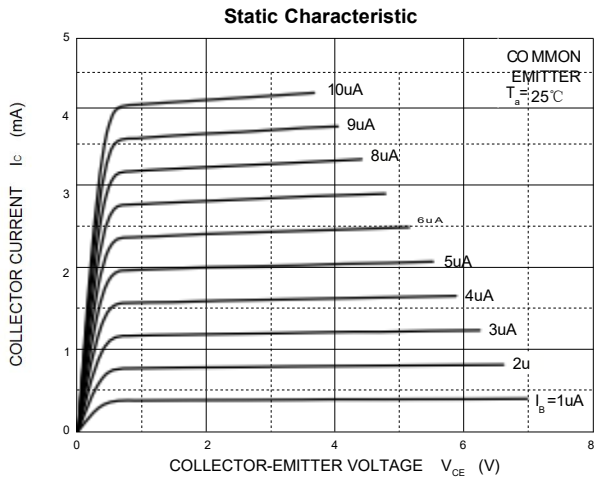
MAXIMUM RATINGS(Ta=25 °C unless otherwise noted)

Symbol	Parameter	Limits	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	100	mA
P _D	Power Dissipation	150	mW
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

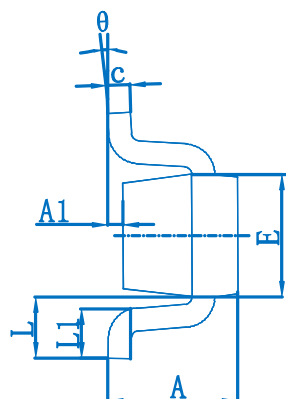
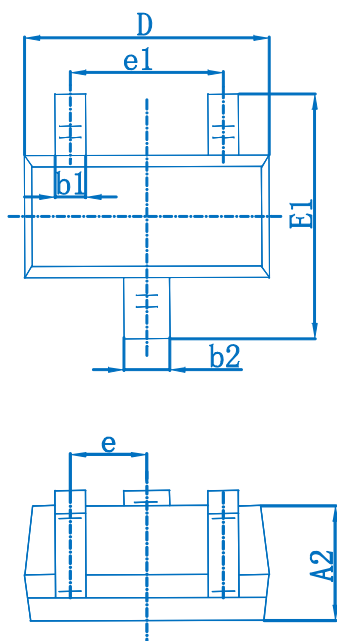
ELECTRICAL CHARACTERISTICS (Ta=25 °C unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _c =50μA, 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 =50μA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =50V, I _E =0			0.5	μA
Emitter cut-off current	I _{EBO}	V _{EB} =4V, I _C =0			0.5	μA
Collector-emitter saturation voltage	V _{CE(sat)}	I _c =5mA, I _B =0.5mA			0.3	V
DC current gain	h _{FE}	V _{CE} =5V, I _c =1mA	100	300	600	
Input resistor	R ₁		32.9	47	61.1	kΩ
Transition frequency	f _T	V _{CE} =10V, I _E =-5mA, f=100MHz		250		MHz

Typical Characteristics

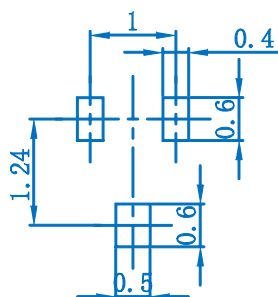


SOT-523 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.700	0.900	0.028	0.035
A1	0.000	0.100	0.000	0.004
A2	0.700	0.800	0.028	0.031
b1	0.150	0.250	0.006	0.010
b2	0.250	0.350	0.010	0.014
c	0.100	0.200	0.004	0.008
D	1.500	1.700	0.059	0.067
E	0.700	0.900	0.028	0.035
E1	1.450	1.750	0.057	0.069
e	0.500 TYP.		0.020 TYP.	
e1	0.900	1.100	0.035	0.043
L	0.400 REF.		0.016 REF.	
L1	0.260	0.460	0.010	0.018
theta	0°	8°	0°	8°

SOT-523 Suggested Pad Layout



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