

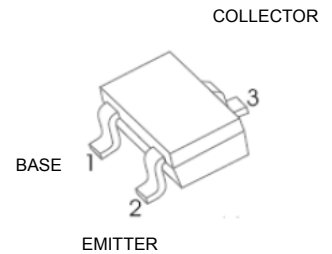
Plastic-Encapsulate Transistors

FEATURES

- Ideally suited for automatic insertion
- For Switching and AF Amplifier Applications
- MARKING:3F

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

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	-50	V
V _{CEO}	Collector-Emitter Voltage	-45	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current –Continuous	-0.1	A
P _{C*}	Collector Power Dissipation	150	mW
R _{ΘJA}	Thermal Resistance From Junction To Ambient	833	°C/W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-65~+150	°C

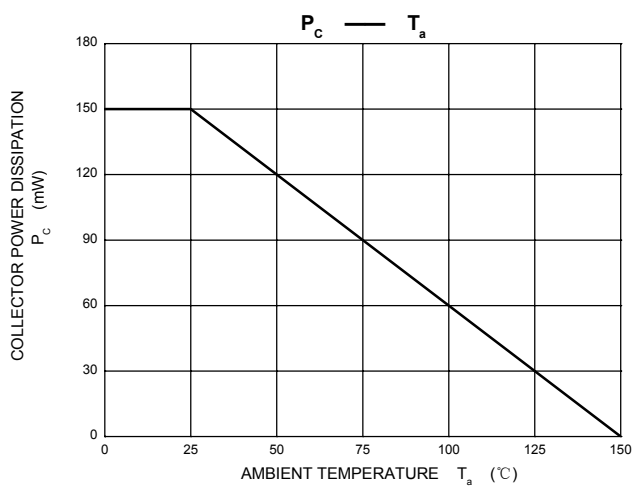
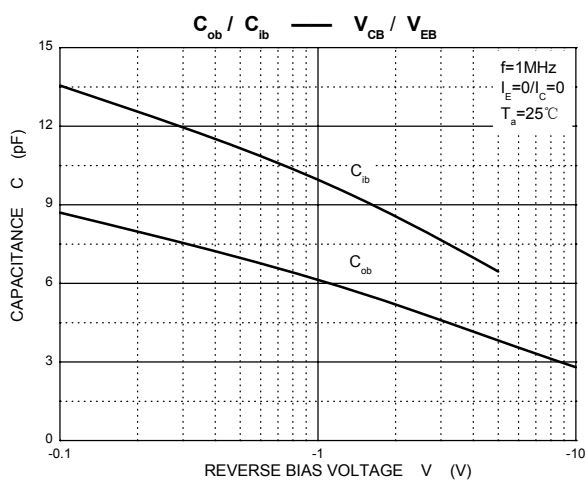
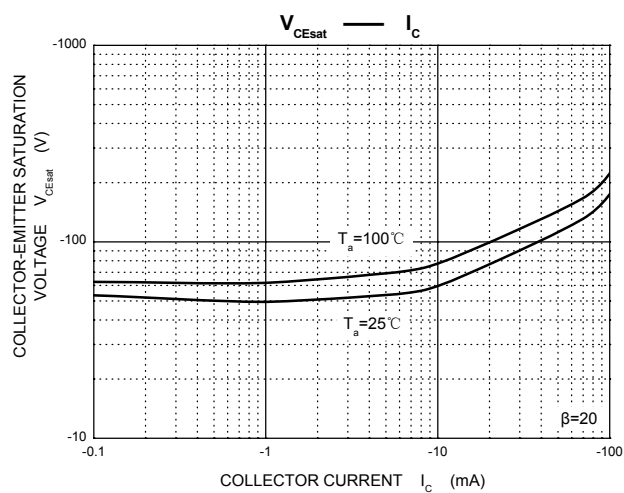
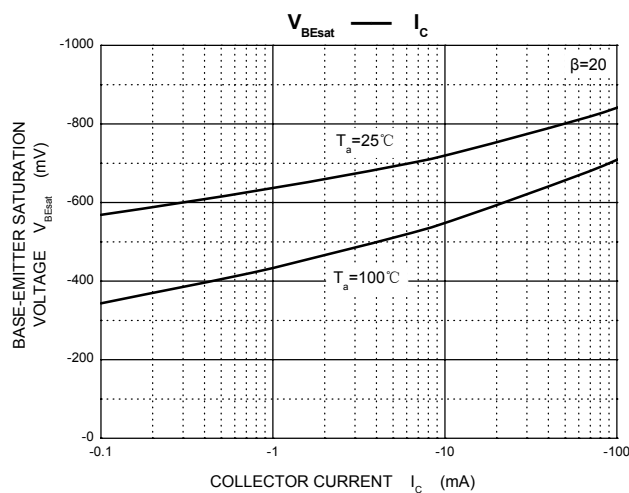
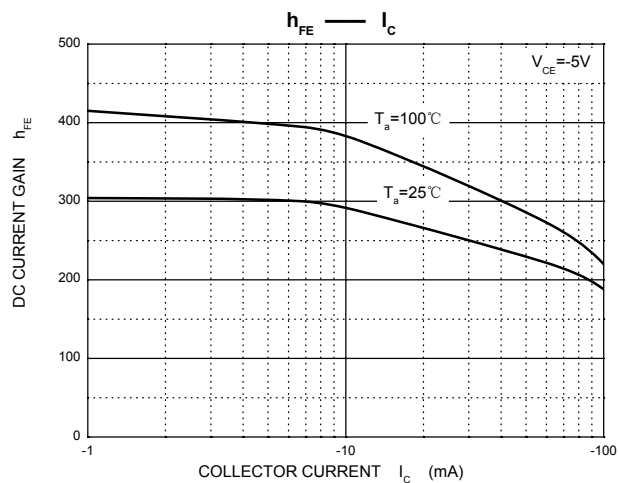
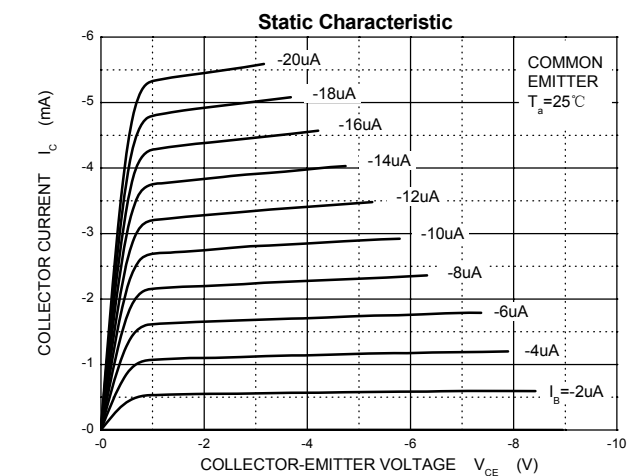


SOT-323

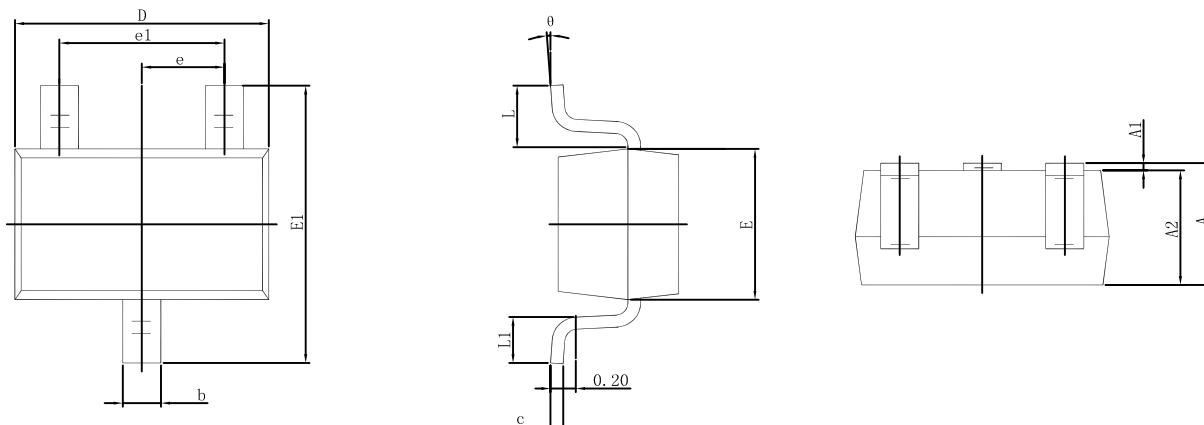
ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V _{CBO}	I _C = -10μA, I _E =0	-50		V
Collector-emitter breakdown voltage	V _{CEO}	I _C = -10mA, I _B =0	-45		V
Emitter-base breakdown voltage	V _{EBO}	I _E = -1μA, I _C =0	-5		V
Collector cut-off current	I _{CBO}	V _{CB} = -30 V, I _E =0		-15	nA
DC current gain	h _{FE}	V _{CE} = -5V, I _C = -2mA	220	475	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-100mA, I _B = -5mA		-0.65	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C = -100mA, I _B = -5mA		-1.1	V
Transition frequency	f _T	V _{CE} = -5V, I _C = -10mA f=100MHz	100		MHz
Collector capacitance	C _{ob}	V _{CB} =-10V, f=1MHz		4.5	pF

Typical Characteristics



SOT-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP.		0.026 TYP.	
e1	1.200	1.400	0.047	0.055
L	0.525 REF.		0.021 REF.	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°