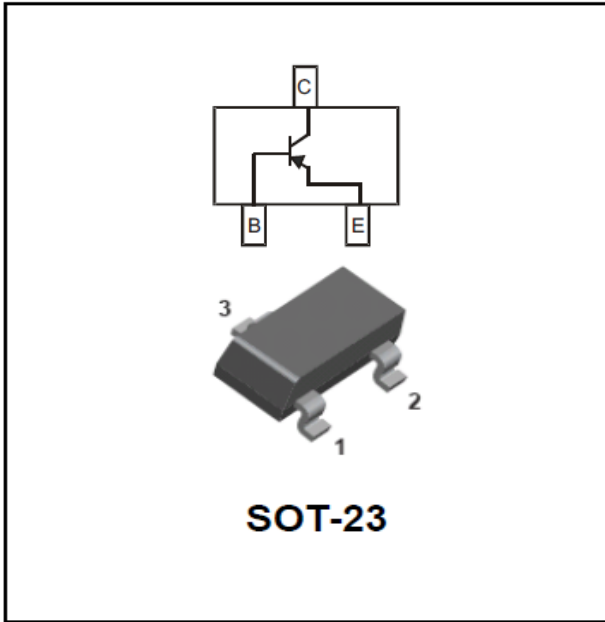


PNP Transistor



Features

- Epoxy meets UL-94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: 2T1



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

Item	Symbol	Unit	Conditions	Value
Collector-Base Voltage	VCBO	V		-40
Collector-Emitter Voltage	VCEO	V		-25
Emitter-Base Voltage	VEBO	V		-5
Collector Current	IC	mA		-500
Total Device Dissipation	PC	mW		300
Thermal Resistance Junction to Ambient	RTHJA	°C/W		416
Junction Temperature	Tj	°C		150
Storage Temperature	TSTG	°C		-55 to +150

■ Electrical Characteristics (Ta=25°C unless otherwise noted)

Item	Symbol	Unit	Conditions	Min	Typ	Max
Collector-base breakdown voltage	V _{(BR)CBO}	V	I _C =-0.1mA, I _E =0	-40		
Collector-emitter breakdown voltage	V _{(BR)CEO*}	V	I _C = -1mA, I _B =0	-25		
Emitter-base breakdown voltage	V _{(BR)EBO}	V	I _E =-0.1mA, I _C =0	-5		
Collector cut-off current	I _{CB0}	uA	V _{CB} =-40V, I _E =0			-0.1
Collector cut-off current	I _{CEO}	uA	V _{CE} =-20V, I _B =0			-0.1
Emitter cut-off current	I _{EBO}	uA	V _{EB} =-5V, I _C =0			-0.1
DC current gain	h _{FE}	V	V _{CE} =1V, I _C =-50mA	120		400
Collector-emitter saturation voltage	V _{CE(sat)}	V	I _C =-500mA, I _B =-50mA			-0.6
Base-emitter saturation voltage	V _{BE(sat)}	V	I _C =-500mA, I _B =-50mA			-1.2
Transition frequency	f _T	MHZ	V _{CE} =-6V, I _C =-20mA, f=30MHZ	150		

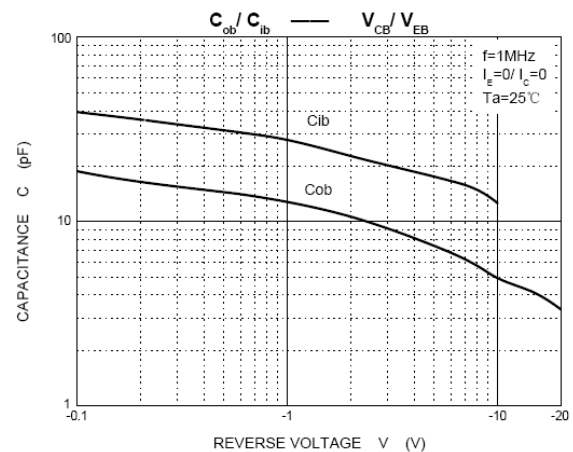
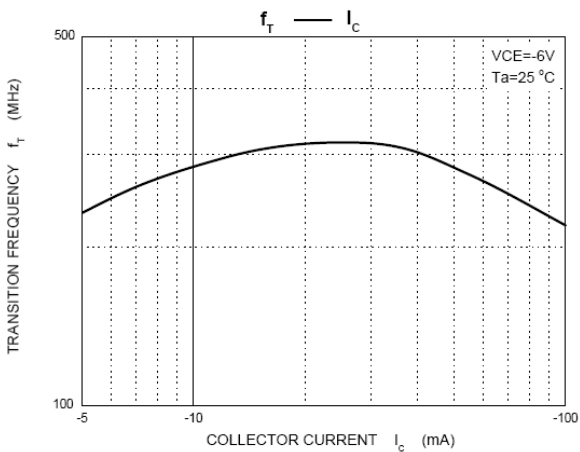
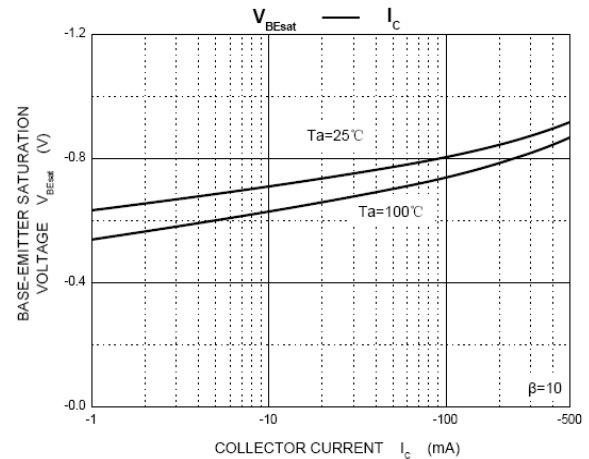
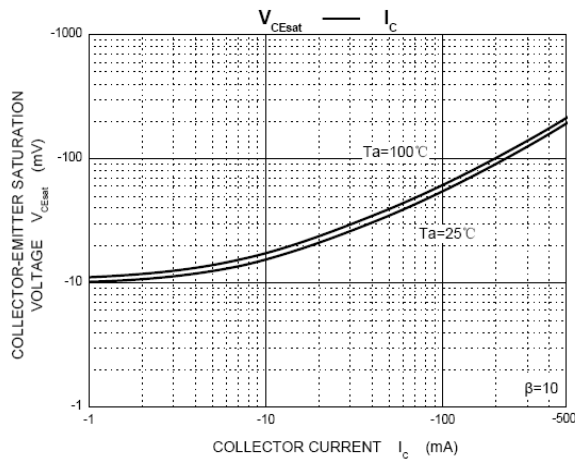
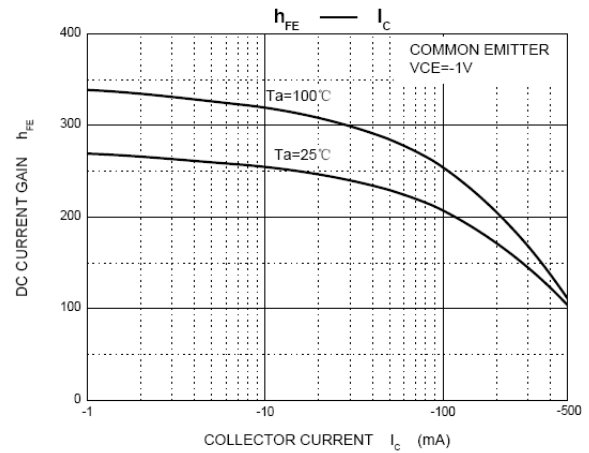
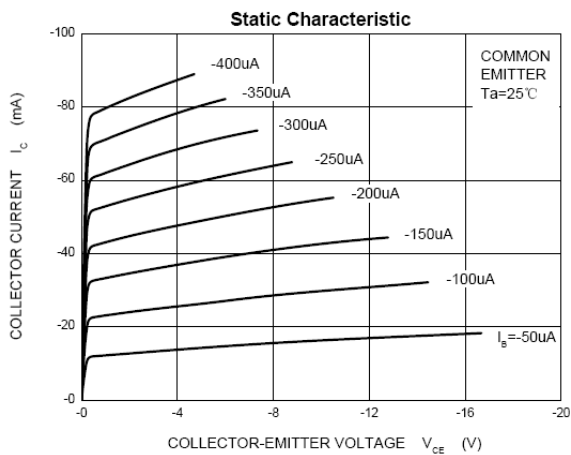
■ CLASSIFICATION OF HFE (1)

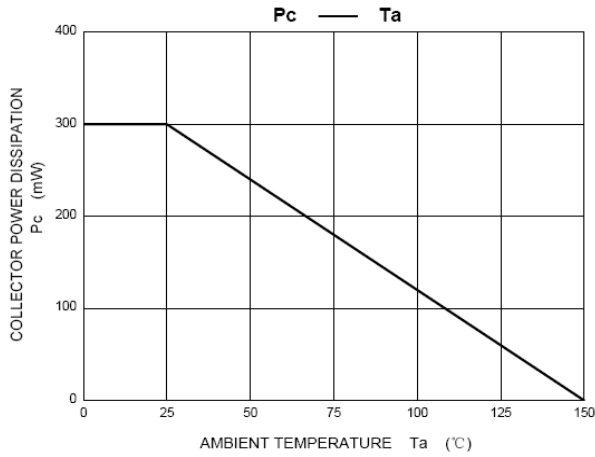
RANK	L	H	J
RANGE	120-200	200-350	300-400

■ Ordering Information (Example)

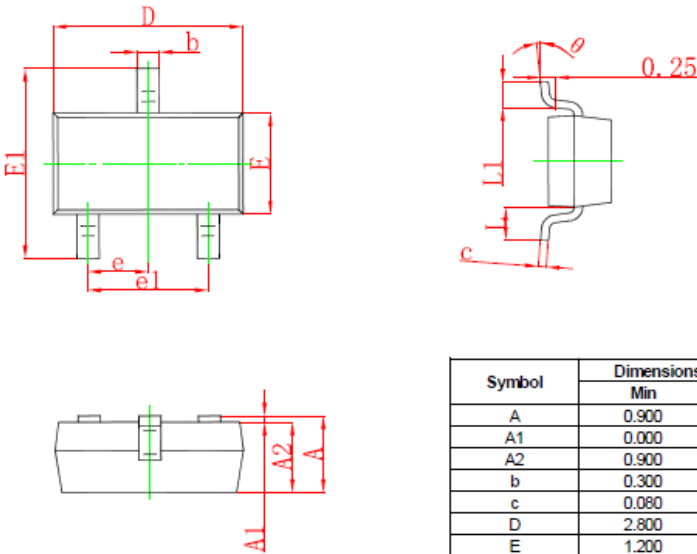
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
S9012	F2	Approximate 0.008	3000	30000	120000	7" reel

■ Characteristics (Typical)

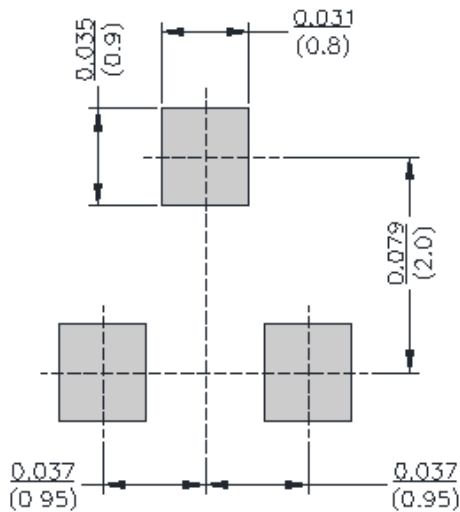




■ SOT-23 Package Outline Dimensions



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


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