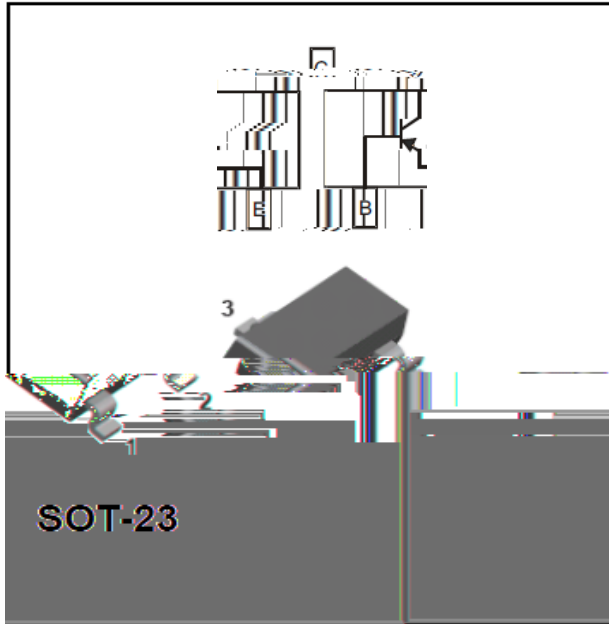


PNP Transistor



Features

- Epoxy meets UL-94 V-0 flammability rating
- Halogen free available upon request by adding suffix "HF"
- Moisture Sensitivity Level 1
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion

Mechanical Data

- **Package:** SOT-23
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:** 4C

■ Maximum Ratings (Ta=25 unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-30	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-0.1	A
P_C	Collector Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	625	/W
T_j	Junction Temperature	150	
T_{stg}	Storage Temperature	-55 +150	



BC859C

■ Electrical Characteristics (Ta=25 unless otherwise noted)

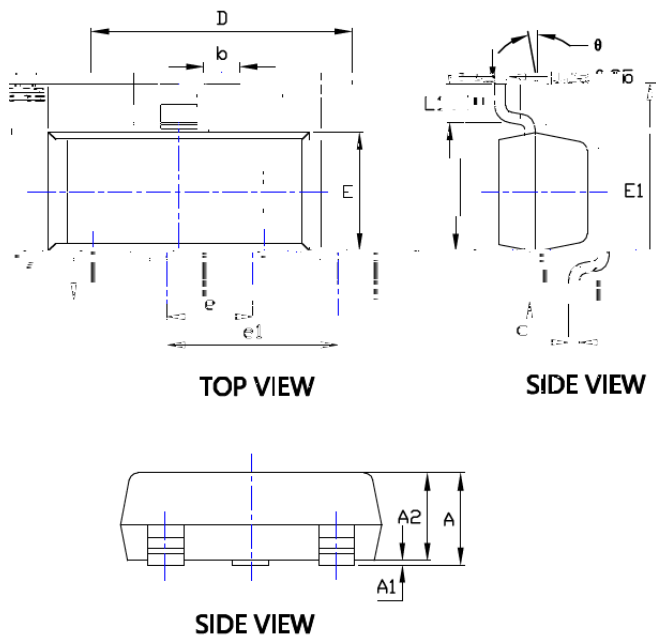
Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C = -10\mu A, I_E = 0$	-30		V
Collector-emitter breakdown voltage	V_{CEO}	$I_C = -10mA, I_B = 0$	-30		V
Emitter-base breakdown voltage	V_{EBO}	$I_E = -1\mu A, I_C = 0$	-5		V
Collector-base cut-off current	I_{CBO}	$V_{CB} = -30V, I_E = 0$		-0.1	μA
Emitter-base cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$		-0.1	μA
DC current gain	h_{FE}	$V_{CE} = -5V, I_C = -2mA$	420	800	
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-base output capacitance	C_{ob}	$V_{CB} = -10V, f = 1MHz$		4.5	pF

■ Ordering Information (Example)

BC859C

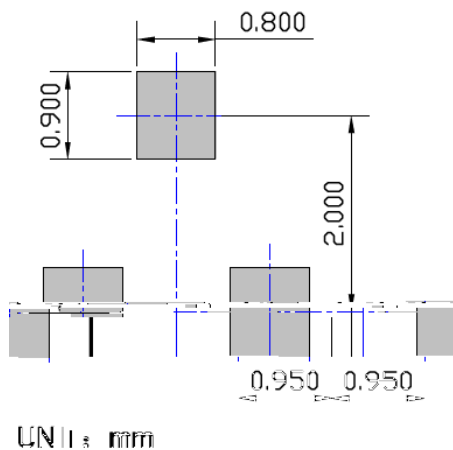


■SOT-23 Package Outline Dimensions



SYMBOL	DIMENSIONS		SYMBOL	DIMENSIONS	
	INCHES	Millimeter		INCHES	Millimeter
0.900	1.150	4	0.085	0.045	
0.000	0.100	A1	0.000	0.034	
0.900	1.050	A2	0.035	0.041	
0.300	0.500	b	0.012	0.020	
0.100	0.200	c	0.004	0.008	
0.300	0.300	d	0.000	0.018	
1.200	1.400	E1	0.047	0.150	
0.000	0.000	e	0.000	0.000	
0.000	0.000	e1	0.000	0.000	
2.000	0.071	0.079	1.800		
REF	0.022REF	0.550R			
0.500	L1	0.012	0.020	0.300	
8°	θ	0°	8°	0°	

■SOT-23 Soldering Footprint





Disclaimer