



FEATURES

- Ideally suited for automatic insertion
- For Switching and AF Amplifier Applications

SOT-23 1. BASE 2. EMITTER 3. COLLECTOR

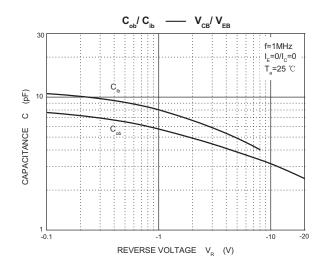
MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

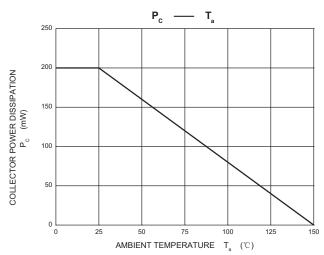
Symbol	Parameter	Value	Unit
	Collector-Base Voltage		
V	BC856	-80	V
V _{CBO}	BC857	-50	V
	BC858	-30	
	Collector-Emitter Voltage		
V	BC856	-65	V
V _{CEO}	BC857	-45	V
	BC858	-30	
V_{EBO}	Emitter-Base Voltage	-5	V
Ic	Collector Current –Continuous	-0.1	A
Pc	Collector Power Dissipation	200	mW
R _{OJA}	Thermal Resistance From Junction To Ambient	625	°C/W
TJ	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-65∼+150	°C

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

Parameter		Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage BC856				-80		
	BC857	V_{CBO}	I _C = -10μΑ, I _E =0	-50		V
	BC858			-30		
Collector-emitter breakdown voltage	BC856			-65		
	BC857	V_{CEO}	I _C = -10mA, I _B =0	-45		V
	BC858			-30		
Emitter-base breakdown voltage	V _{EBO}	I _E = -1μΑ, I _C =0	-5		V	
Collector cut-off current	BC856		V _{CB} = -70 V , I _E =0			
	BC857	I _{CBO}	V_{CB} = -45 V , I_{E} =0		-0.1	μΑ
	BC858		V_{CB} = -25 V , I_{E} =0			
Collector cut-off current	BC856		V _{CE} = -60 V , I _B =0			
	BC857	I _{CEO}	V_{CE} = -40 V , I_{B} =0		-0.1	μΑ
	BC858		V_{CE} = -25 V , I_{B} =0			
Emitter cut-off current		I _{EBO}	V_{EB} = -5 V , I_{C} =0		-0.1	μΑ
DC current gain BC856	A, 857A,858A			125	250	
BC856	B, 857B,858B	h _{FE}	V_{CE} = -5 V , I_{C} = -2 mA	220	475	
ВС	857C,BC858C			420	800	
Collector-emitter saturation voltage		V _{CE} (sat)	I _C =-100mA,I _B = -5 mA		-0.5	V
Base-emitter saturation voltage	V _{BE} (sat)	I _C = -100mA, I _B = -5mA		-1.1	V	
Transition frequency		f⊤	V _{CE} = -5 V, I _C = -10mA f=100MHz	100		MHz
Collector capacitance	C _{ob}	V _{CB} =-10V, f=1MHz		4.5	рF	

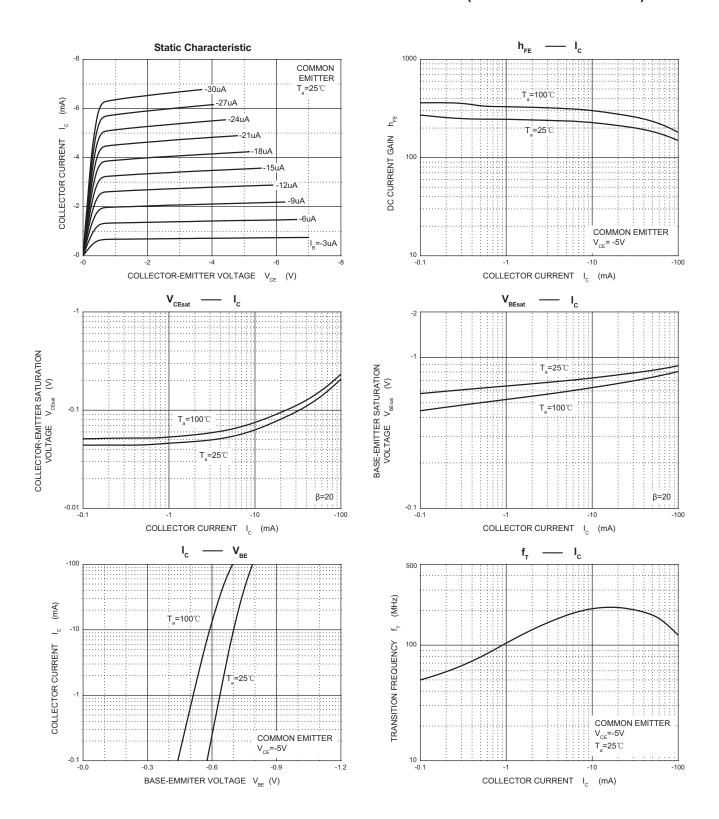
RATING AND CHARACTERISTICS CURVES (BC856 THRU BC858)





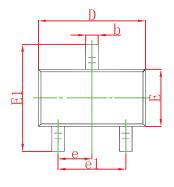


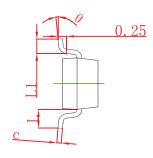
RATING AND CHARACTERISTICS CURVES (BC856 THRU BC858)

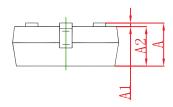




SOT-23 Package Outline Dimensions

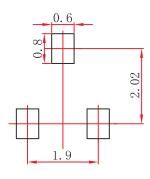






Cumahal	Dimensions	In Millimeters	Dimensions In Inches			
Symbol	Min	Max	Min	Max		
А	0.900	1.150	0.035	0.045		
A1	0.000	0.100	0.000	0.004		
A2	0.900	1.050	0.035	0.041		
b	0.300	0.500	0.012	0.020		
С	0.080	0.150	0.003	0.006		
D	2.800	3.000	0.110	0.118		
E	1.200	1.400	0.047	0.055		
E1	2.250	2.550	0.089	0.100		
е	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:± 0.05mm.
- 3. The pad layout is for reference purposes only.

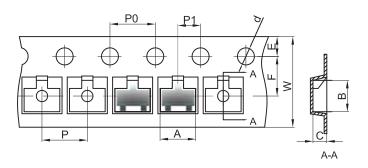
DEVICE MARKING

BC856A=3A;BC856B=3B;

BC857A=3E;BC857B=3F;BC857C=3G;

BC858A=3J; BC858B=3K; BC858C=3L

SOT-23 Embossed Carrier Tape

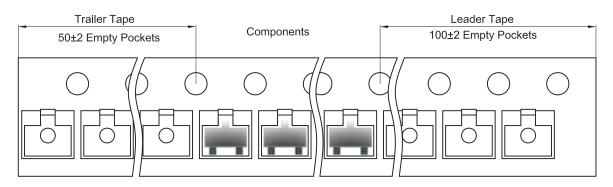


Packaging Description:

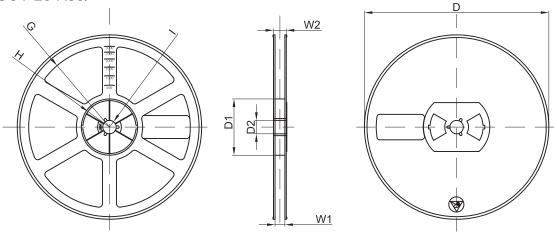
SOT-23 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	Pkg type A B C d E F P0 P P1 W									
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-23 Tape Leader and Trailer



SOT-23 Reel



Dimensions are in millimeter										
Reel Option	D	D1	D2	G	Н	I	W1	W2		
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30		

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	

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