UMW BC857BW

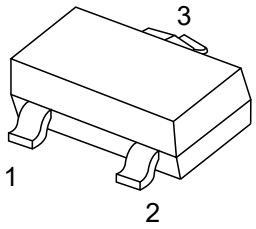
1.Features

- TRANSISTOR (PNP)
- Ideally suited for automatic insertion
- For Switching and AF Amplifier Applications

2.Pinning Information

Pin	Symbol	Description
1	B	BASE
2	E	EMITTER
3	C	COLLECTOR

SOT-323



3.Absolute Maximum Ratings T_A= 25°C

Parameter	Symbol	Value	Units
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-45	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current –Continuous	I_C	-0.1	A
Collector Power Dissipation	P_C	150	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	833	°C/W
Operation Junction and Storage Temperature Range	T_J, T_{STG}	55 to 150	°C

4.Electrical Characteristics (T_A= 25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min	Max	Units
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 Cutoff Current	I_{CBO}	V_{CB}=-30V, 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 output capacitance	C_{ob}	V_{CB}=-10V, f=1MHz		4.5	pF

5.Typical Characteristic

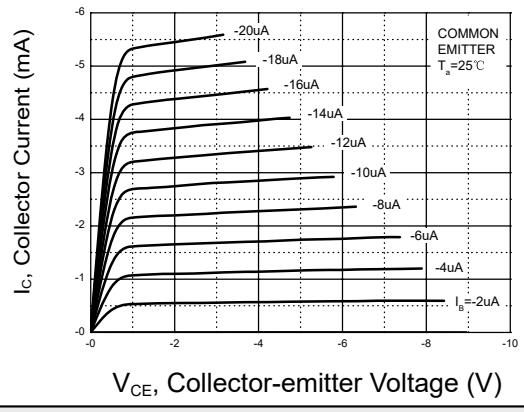


Figure 1: Static Characteristic

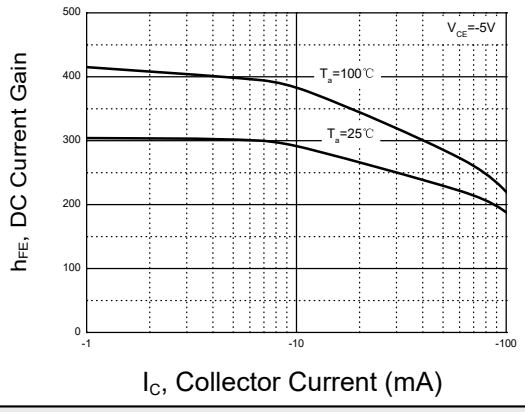


Figure 2: h_{FE} —— I_C

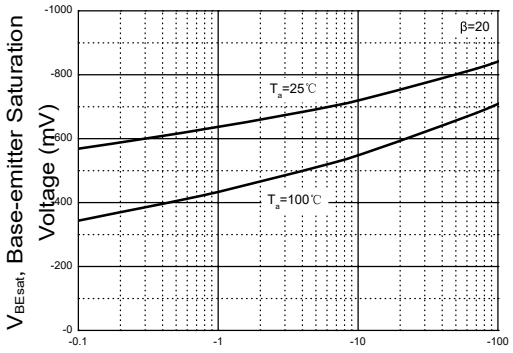


Figure 3: V_{BEsat} —— I_C

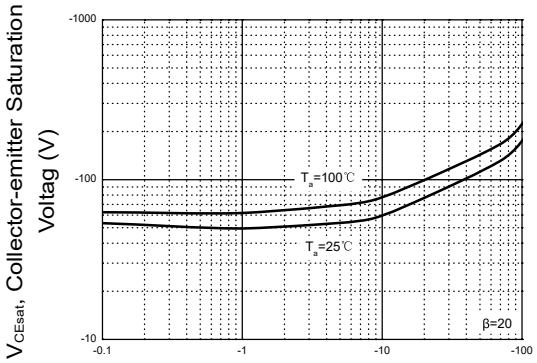


Figure 4: V_{CEsat} —— I_C

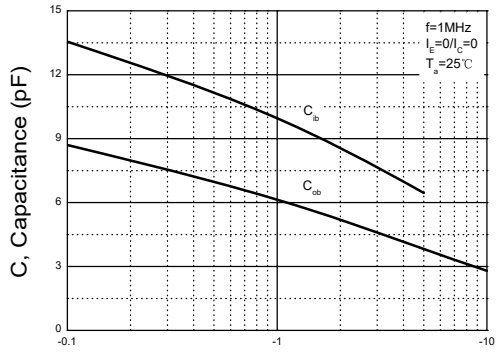


Figure 5: C_{ob}/C_{ib} —— V_{CB}/V_{EB}

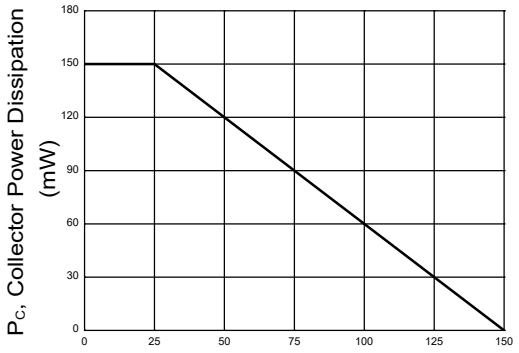
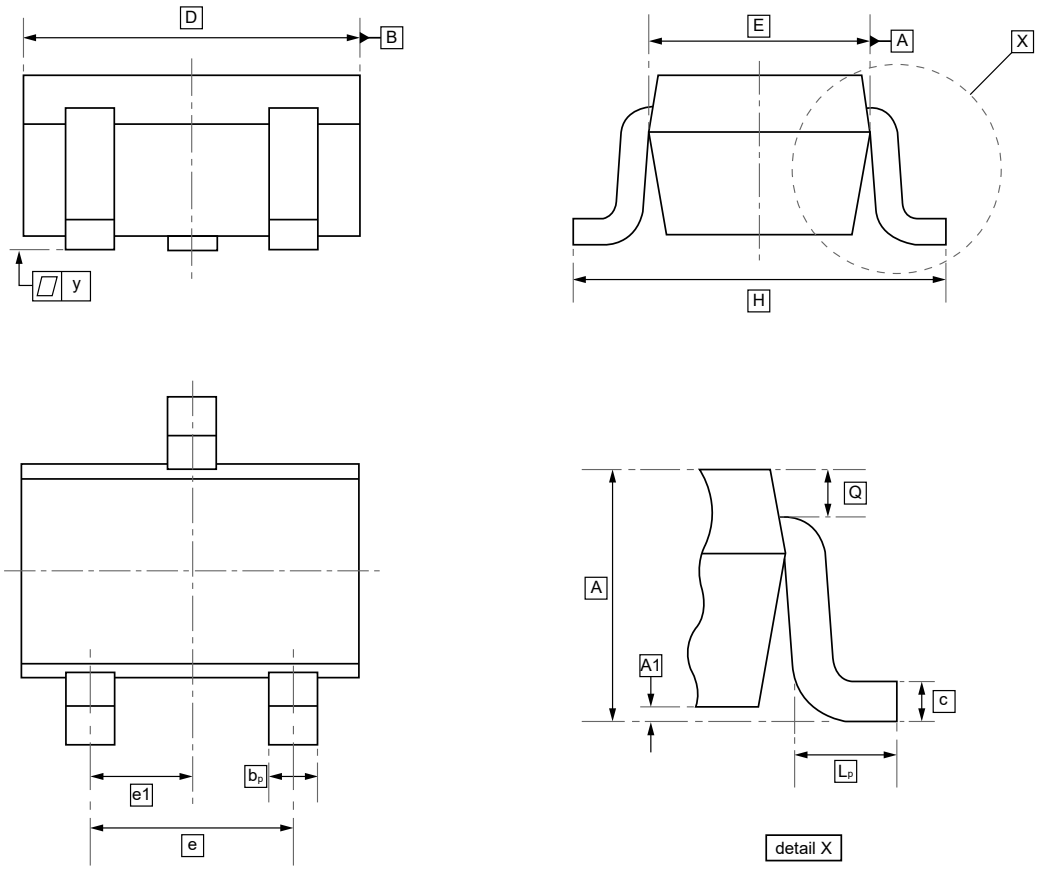


Figure 6: P_C —— T_A

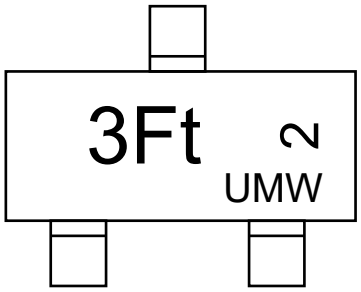
6.SOT-323 Package Outline Dimensions



DIMENSIONS (mm are the original dimensions)

Symbol	A	A1	b_p	c	D	E	e	e1	H	L_p	Q
Min	0.8	0.1	0.3	0.10	1.8	1.15	1.3	0.65	2.0	0.15	0.13
Max	1.1		0.4	0.25	2.3	1.35			2.55	0.45	0.23

7.Ordering Information



Order Code	Package	Base QTY	Delivery Mode
UMW BC857BW	SOT-323	3000	Tape and reel

8.Disclaimer

UMW reserves the right to make changes to all products, specifications. Customers should obtain the latest version of product documentation and verify the completeness and currency of the information before placing an order.

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