

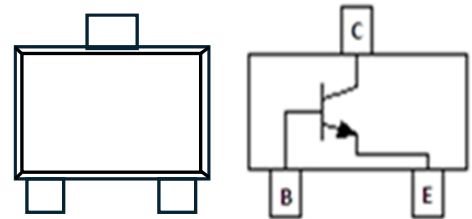
FEATURES AND BENEFITS

Product Summary

I_C	100mA	@25 °C
BV_{CBO}	80V	@ $I_C=10\mu A$
BV_{CEO}	65V	@ $I_C=10mA$
BV_{EBO}	6V	@ $I_E=10\mu A$

- RoHS Compliant / Green EMC UL Flammability Classification Rating 94V-0
- Matte Tin (Sn) Lead finish Solderable per MIL-STD-202, Method 208
- Moisture Sensitivity: Level 1 per J-STD-020
- Weight: 0.0012 grams (Approximate)

SOT-723



Maximum Ratings (TA = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	80	V
Collector-Emitter Voltage	V_{CEO}	65	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	100	mA
Collector Power Dissipation	P_T	265	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 to +150	°C

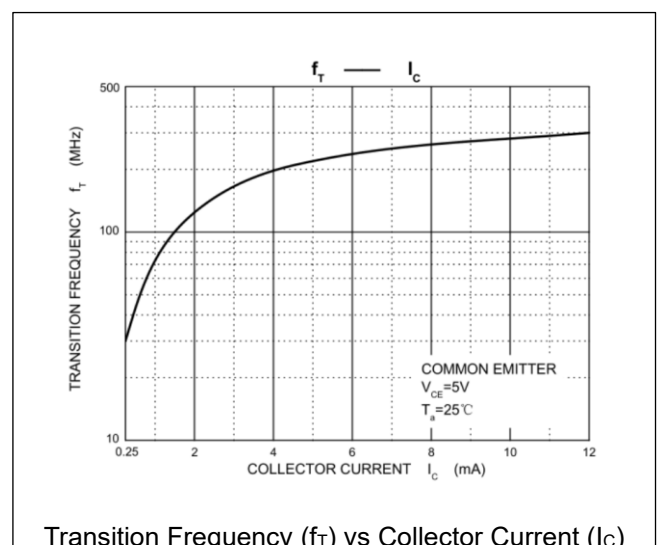
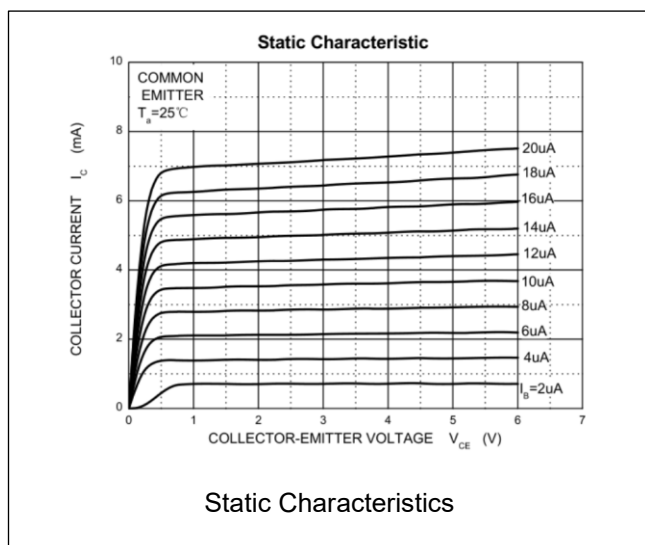
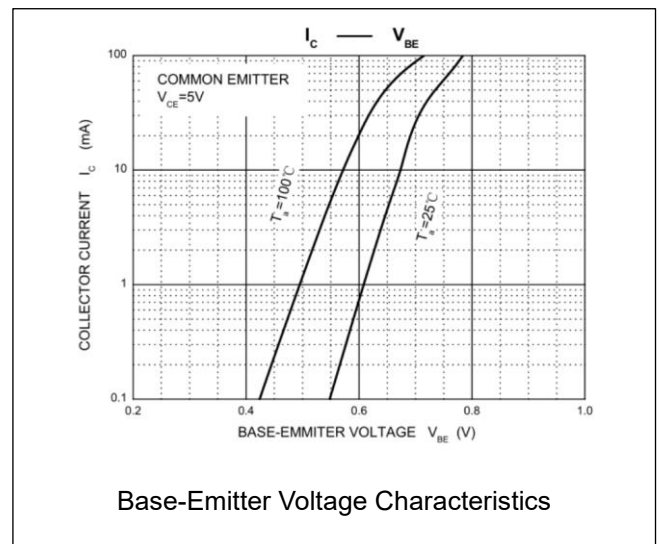
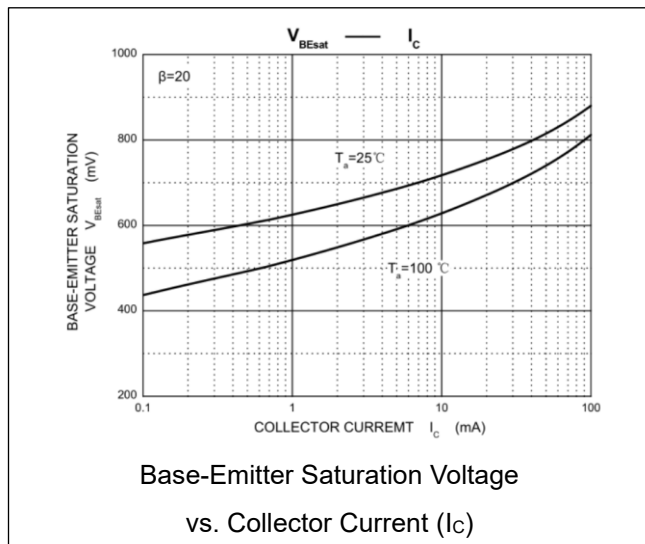
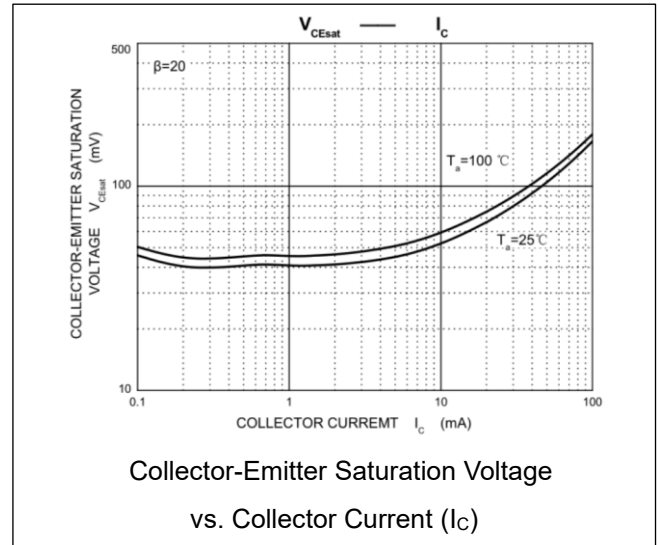
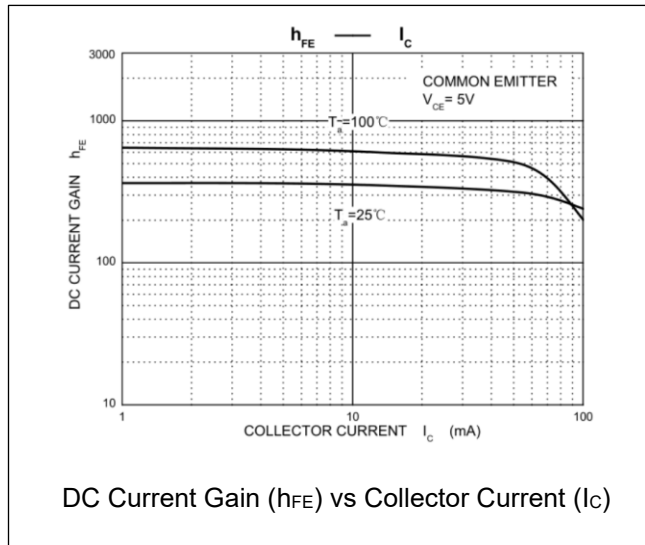
THERMAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Thermal Resistance from Junction to Ambient*	$R_{\theta JA}$	472	°C/W

* Device mounted on FR-5: 1.0 X 0.75 X 0.062 inch

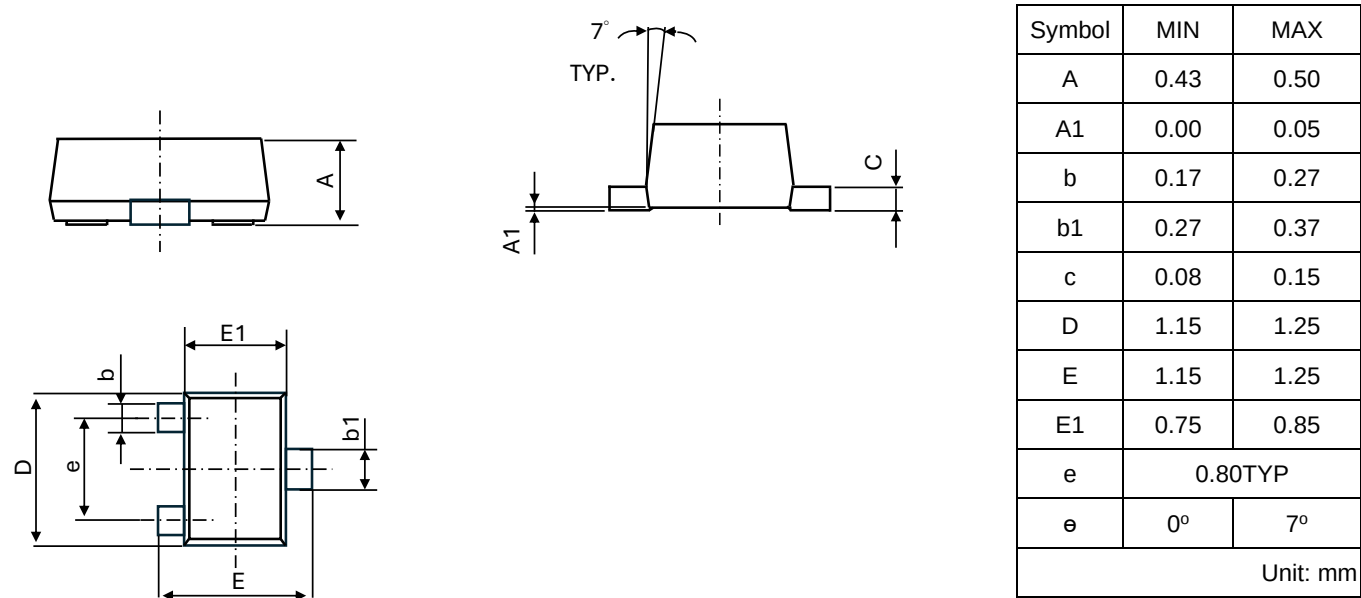
ELECTRICAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)					
PARAMETER	SYMBOL	CONDITION	MIN	MAX	UNIT
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 10mA, I_B = 0$	65		V
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	80		V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	6		V
Collector Cutoff Current	I_{CBO}	$V_{CB} = 30V, I_E = 0$		15	nA
Emitter Cutoff Current	I_{CEO}	$V_{CE} = 30V, I_B = 0V$		1	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$		100	nA
DC Current Gain	h_{FE}	$V_{CE} = 5V, I_C = 2mA$	200	450	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 10mA, I_B = 0.5mA$		0.30	V
		$I_C = 100mA, I_B = 5mA$		0.60	
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 10mA, I_B = 0.5mA$		0.90	V
		$I_C = 100mA, I_B = 5mA$		1.10	
Base-Emitter Voltage	$V_{BE(on)}$	$V_{CE} = 5V, I_C = 2mA$	0.58	0.7	V
		$V_{CE} = 5V, I_C = 10mA$		0.77	
Transition Frequency	f_T	$V_{CE} = 5V, I_C = 10mA, f = 100MHz$	100		MHz

RATING AND CHARACTERISTICS CURVES

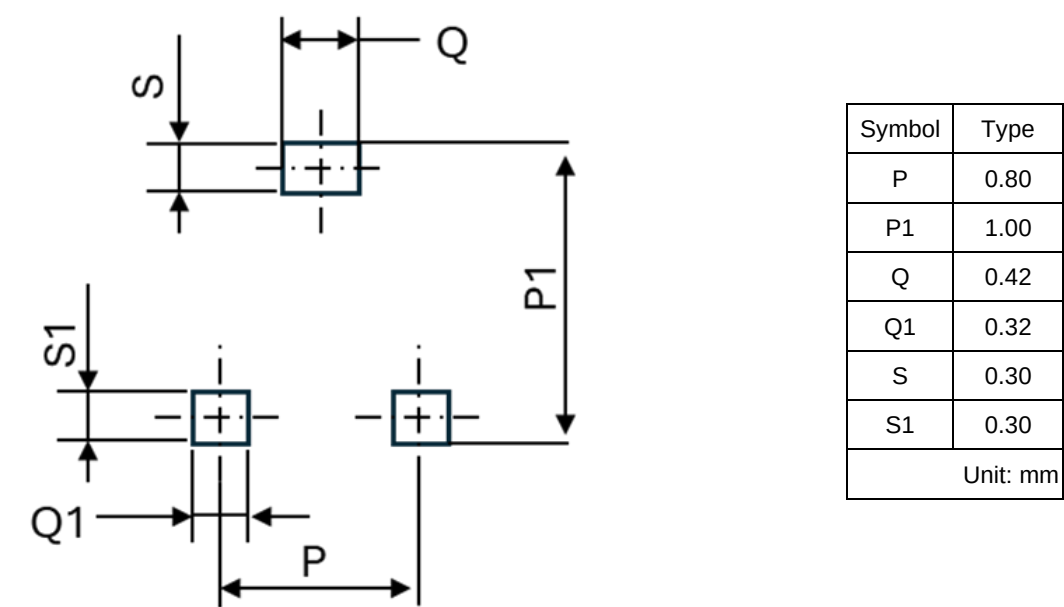


PACKAGE OUTLINE DIMENSIONS

SOT-723

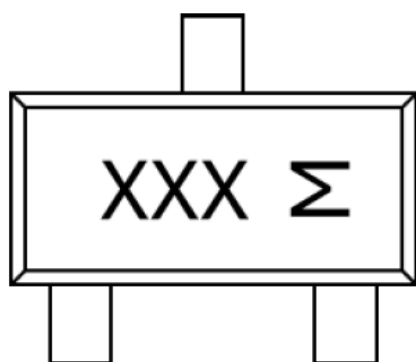


SUGGESTED PAD LAYOUT



DEVICE MARKING CODE AND ORDERING INFORMATION

DEVICE	Marking	Quantity	Packing
BC846BM3	1B	8000/7"Reel	Tape & Reel



XXX: Product Marking Code

Σ : Date Code (Rotate 90° counterclockwise)

Odd Year	Even Year
1	E
2	F
3	H
4	J
5	K
6	L
7	N
8	P
9	U
T	X
V	Y
C	Z

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