

BC856BS-AU

PNP GENERAL PURPOSE DUAL TRANSISTORS

VOLTAGE	65 Volt	POWER	150 mWatt
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FEATURES

- General purpose amplifier applications
- Collector current $I_C = 100\text{mA}$
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case : SOT-363, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.006 grams

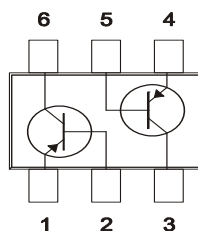
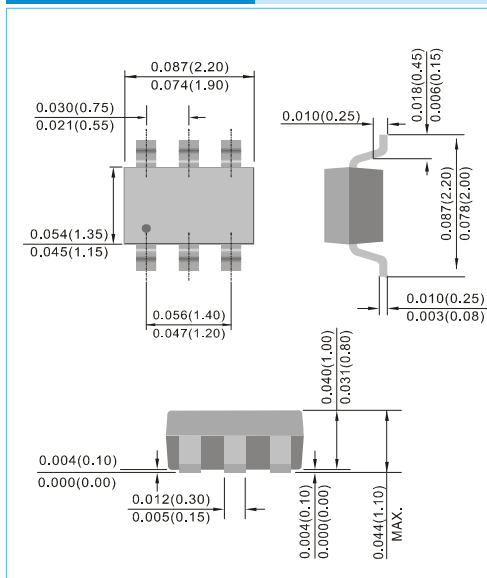


Fig.53

SOT-363

Unit : inch(mm)



ABSOLUTE RATINGS

Parameter	Symbol	Value	Units
Collector - Emitter Voltage	V_{CEO}	-65	V
Collector - Base Voltage	V_{CBO}	-80	V
Emitter - Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-100	mA

THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Max .Total Power Dissipation	P_{TOT}	150	mW
Operating Junction Temperature and Storage Temperature range	T_J, T_{STG}	-55 to 150	°C



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ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Collector - Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -10mA$	-65	-	-	V
Collector - Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, V_{EB} = 0$	-80	-	-	V
Emitter - Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -1.0\mu A$	-5.0	-	-	V
Collector-Base Cutoff Current	I_{CBO}	$V_{CB} = -30V, I_E = 0$	-	-	-15	nA
DC Current Gain	h_{FE}	$I_C = -2.0mA, V_{CE} = -5V$	220	-	475	-
Collector - Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = -10mA, I_B = -0.5mA$ $I_C = -100mA, I_B = -5.0mA$	-	-	-0.3 -0.65	V
Base - Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_C = -10mA, I_B = -0.5mA$	-0.6	-	-0.9	V
Collector capacitance	C_{CB}	$V_{CB} = 10V, I_E = 0A$	-	1.9	-	pF
Emitter Capacitance	C_{EB}	$V_{EB} = 0.5V, I_C = 0A$	-	11	-	pF
Gain-Bandwidth Product	f_T	$V_{CE} = -5V, I_C = -10mA$ $f = 100MHz$	100	-	-	MHz

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ELECTRICAL CHARACTERISTICS CURVE

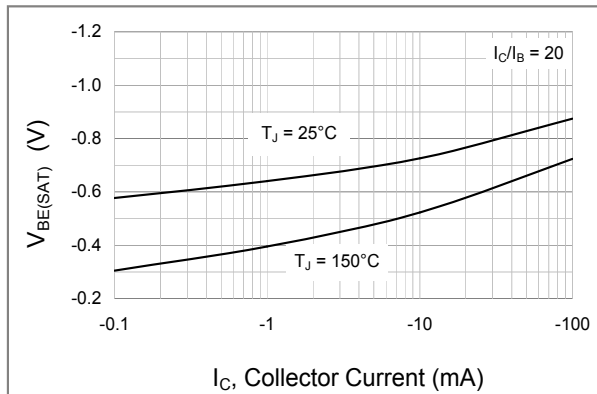


Fig.1 Base-Emitter Saturation Voltage VS Collector Current

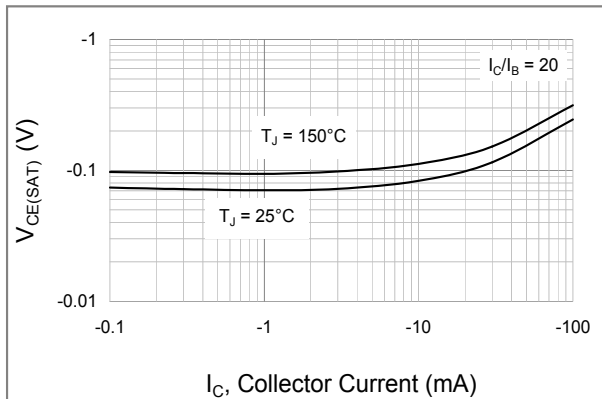


Fig.2 Collector-Emitter Saturation Voltage VS Collector Current

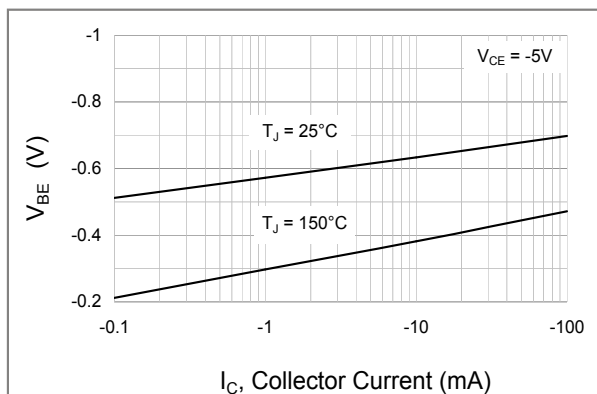


Fig.3 Base-Emitter Voltage VS Collector Current

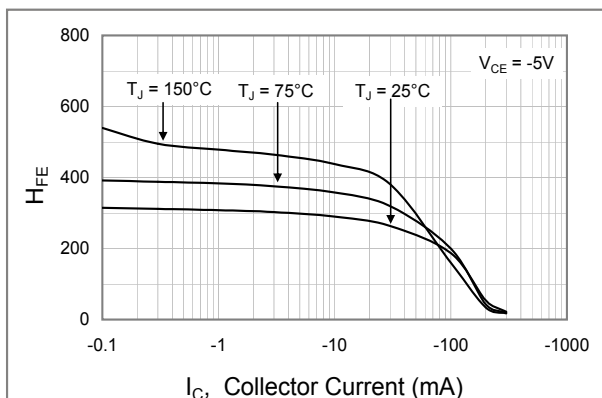


Fig.4 Typical DC Current Gain VS Collector Current

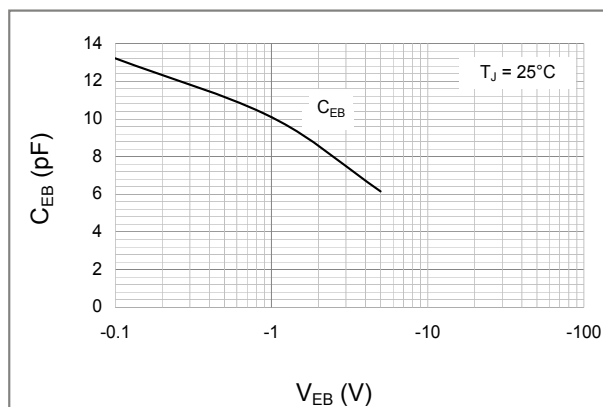


Fig.5 Emitter Capacitance VS Emitter-Base Voltage

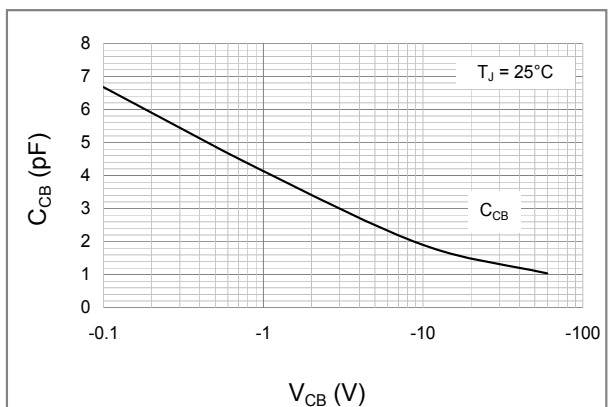


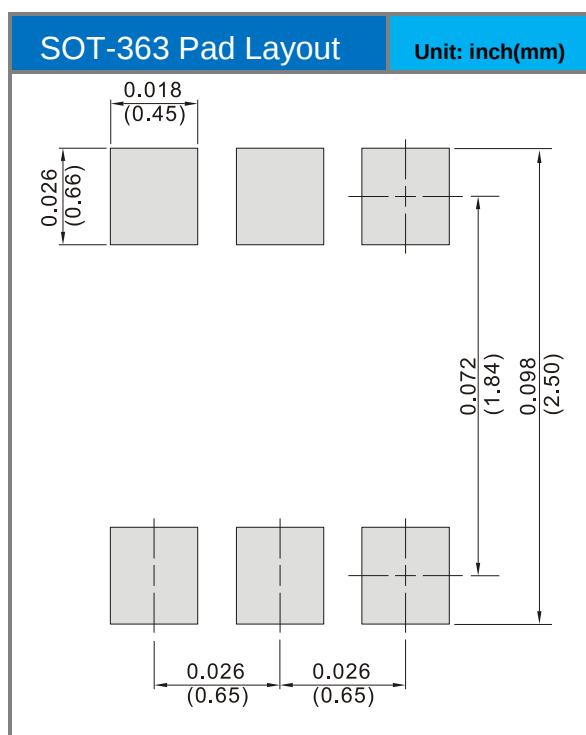
Fig.6 Collector Capacitance VS Collector-Base Voltage

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
BC856BS-AU	SOT-363	3K pcs / 7" reel	56S

Mounting Pad Layout





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