

**SOT-23 BIPOLAR TRANSISTORS
TRANSISTOR(NPN)**

FEATURES

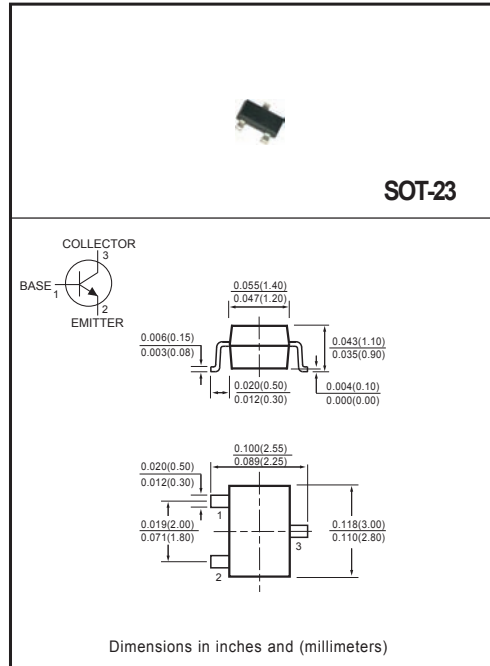
- * Power dissipation
P_{CM} : □ 0.225 □ W (Tamb=25°C) Note1
- * Collector current
I_{CM} : □ 0.1 □ A
- * Collector-base voltage
V_{CBO} : □ 80 □ V
- * Operating and storage junction temperature range
T_J, T_{stg}: -55°C to +150°C

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.008 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



Dimensions in inches and (millimeters)

ELECTRICAL CHARACTERISTICS (@ TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	MIN	MAX	UNITS
Collector - base breakdown voltage (I _C = 10μA, I _E =0)	V _{CBO}	80	-	V
Collector - emitter breakdown voltage (I _C = 10mA, I _B =0)	V _{CEO}	65	-	V
Emitter - base breakdown voltage (I _E = 10μA, I _C =0)	V _{EBO}	6	-	V
Collector cut - off current (V _{CB} = 70V, I _E =0)	I _{CBO}	-	0.1	μA
Collector cut - off current (V _{CE} = 60V, I _B =0)	I _{CEO}	-	0.1	μA
Emitter cut - off current (V _{EB} = 5V, I _C =0)	I _{EBO}	-	0.1	μA
DC current gain (V _{CE} = 5V, I _C = 2mA)	h _{FE(1)}	200	450	-
Collector - emitter saturation voltage (I _C = 100mA, I _B = 5mA)	V _{CE(sat)}	-	0.5	V
Base - emitter saturation voltage (I _C = 100mA, I _B = 5mA)	V _{BE(sat)}	-	1.1	V
Transition frequency (V _{CE} = 5V, I _C = 10mA, f= 100MHz)	f _T	100	-	MHz

DEVICE MARKING

BC846B	1B
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Notes: 1. Transistor mounted on an FR4 Printed-circuit board.
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

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