

FOR MORE DETAILED INFORMATION SEE LATEST ISSUE OF HANDBOOK SC04 OR DATA SHEET

## SILICON PLANAR EPITAXIAL TRANSISTORS

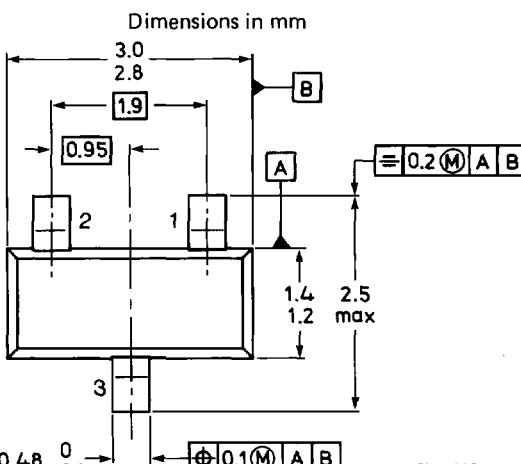
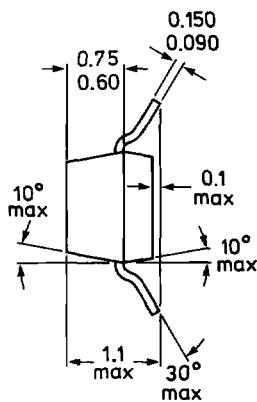
General purpose n-p-n transistors in a plastic SOT-23 package.

### QUICK REFERENCE DATA

		BC846	BC847	BC848
Collector-emitter voltage ( $V_{BE} = 0$ )	$V_{CES}$	max. 80	50	30 V
Collector-emitter voltage (open base)	$V_{CEO}$	max. 65	45	30 V
Collector current (peak value)	$I_{CM}$	max. 200	200	200 mA
Total power dissipation up to $T_{amb} = 25^\circ\text{C}$	$P_{tot}$	max. 250	250	250 mW
Junction temperature	$T_j$	max. 150	150	150 $^\circ\text{C}$
DC current gain $I_C = 2 \text{ mA}; V_{CE} = 5 \text{ V}$	$h_{fe}$	$> 110$ $< 450$	110 800	110 800
Transition frequency at $f = 100 \text{ MHz}$ $I_C = 10 \text{ mA}; V_{CE} = 5 \text{ V}$	$f_T$	$> 100$	$> 100$	$> 100 \text{ MHz}$
Noise figure at $R_S = 2 \text{ k}\Omega$ $I_C = 200 \mu\text{A}; V_{CE} = 5 \text{ V}$ $f = 1 \text{ kHz}; B = 200 \text{ Hz}$	F	typ. 2	2	2 dB

### MECHANICAL DATA

Fig. 1 SOT-23.



TOP VIEW

Reverse pinning types are available on request.

### Marking code:

- BC846 = 1Dp
- BC846A = 1Ap
- BC846B = 1Bp
- BC847 = 1Hp
- BC847A = 1Ep
- BC847B = 1Fp
- BC847C = 1Gp
- BC848 = 1Mp
- BC848A = 1Jp
- BC848B = 1Kp
- BC848C = 1Lp

### Pinning:

- 1 = base
- 2 = emitter
- 3 = collector

