

# SOT -23 Plastic Encapsulate Transistors

BC8 17-16LT1 TRANSISTOR ( NPN )

BC8 17-25LT1

BC8 17-40LT1

## FEATURES

Power dissipation

$P_{CM} : 0.3 \text{ W}$  ( $T_{amb}=25 \text{ }^\circ\text{C}$ )

Collector current

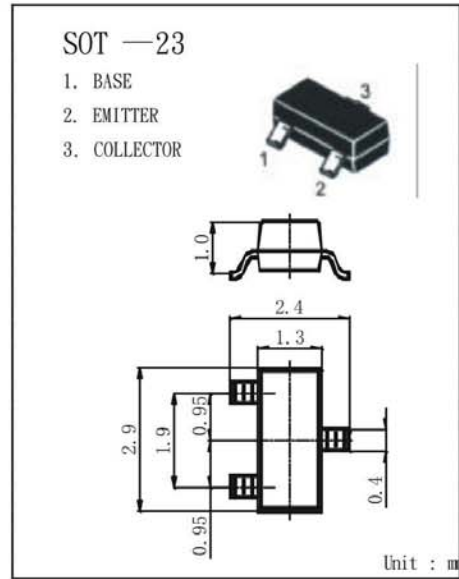
$I_{CM} : 0.5 \text{ A}$

Collector base voltage

$V_{CBO} : 50 \text{ V}$

Operating and storage junction temperature range

$T_J, T_{stg} : -55 \text{ }^\circ\text{C}$  to  $+150 \text{ }^\circ\text{C}$



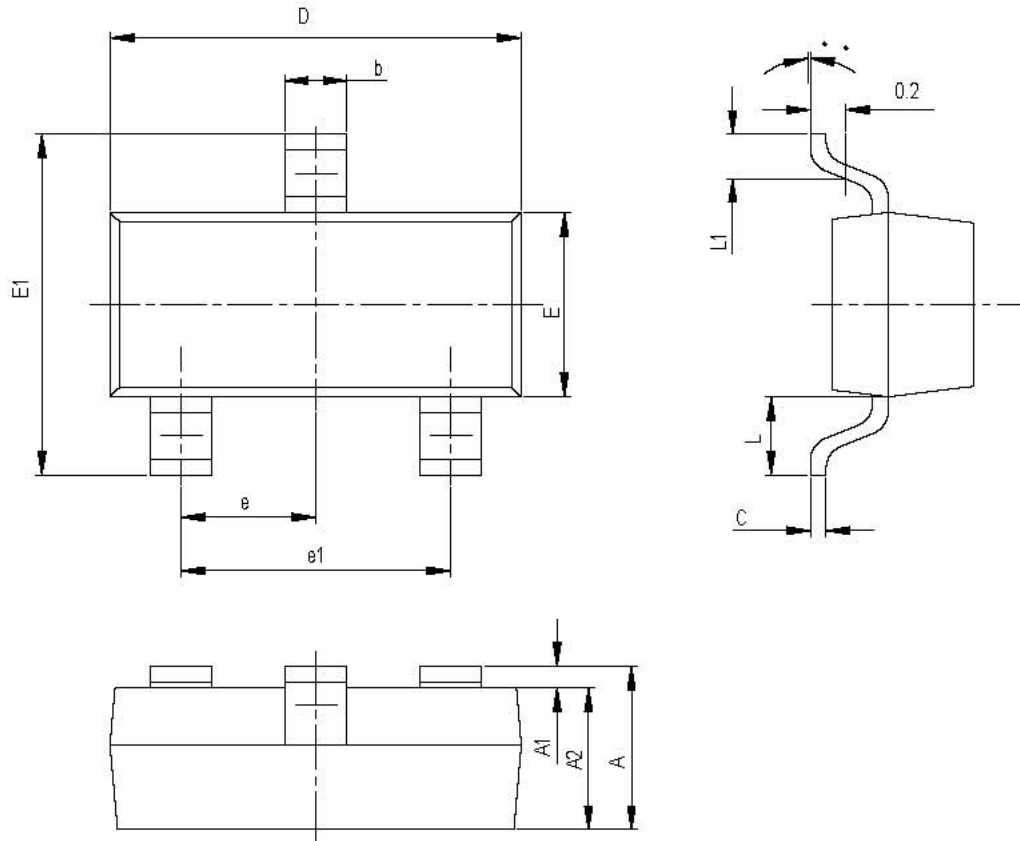
## ELECTRICAL CHARACTERISTICS ( $T_{amb} = 25 \text{ }^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{CBO}$	$I_C = 10 \text{ } \mu\text{A}$ , $I_E = 0$	50		V
Collector-emitter breakdown voltage	$V_{CEO}$	$I_C = 10 \text{ mA}$ , $I_B = 0$	45		V
Emitter-base breakdown voltage	$V_{EBO}$	$I_E = 1 \text{ } \mu\text{A}$ , $I_C = 0$	5		V
Collector cut-off current	$I_{CBO}$	$V_{CB} = 45 \text{ V}$ , $I_E = 0$		0.1	$\mu\text{A}$
Collector cut-off current	$I_{CEO}$	$V_{CE} = 40 \text{ V}$ , $I_B = 0$		0.2	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 4 \text{ V}$ , $I_C = 0$		0.1	$\mu\text{A}$
DC current gain					
	817-16		100	250	
	817-25	$V_{CE} = 1 \text{ V}$ , $I_C = 100 \text{ mA}$	160	400	
	817-40		250	600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500 \text{ mA}$ , $I_B = 50 \text{ mA}$		0.7	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 500 \text{ mA}$ , $I_B = 50 \text{ mA}$		1.2	V
Transition frequency	$f_T$	$V_{CE} = 5 \text{ V}$ , $I_C = 10 \text{ mA}$ $f = 100 \text{ MHz}$	100		MHz

## DEVICE MARKING

BC817-16LT1=6A ; BC817-25LT1=6B; BC817-40LT1=6C

## SOT-23 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950TPY		0.037TPY	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°