



## SOT-23-3L Plastic-Encapsulated Transistors

### 2SB1197K TRANSISTOR (PNP)

#### FEATURES

Power dissipation

$$P_{CM}: 200 \text{ mW (Tamb=25°C)}$$

Collector current

$$I_{CM}: -800 \text{ mA}$$

Collector-base voltage

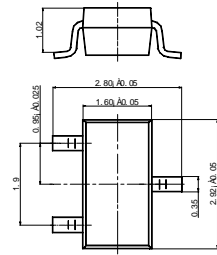
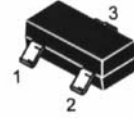
$$V_{(BR)CBO}: -40 \text{ V}$$

Operating and storage junction temperature range

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

#### SOT-23-3L

1. BASE
2. EMITTER
3. COLLECTOR



#### ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -50\mu A, I_E = 0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-32			V
Emitter-Base breakdown voltage	$V_{(BR)EBO}$	$I_E = -50\mu A, I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -20V, I_E = 0$			-0.5	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4V, I_C = 0$			-0.5	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE} = -3V, I_C = -100mA$	82		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -0.5A, I_B = -50mA$			-0.5	V
Transition frequency	$f_T$	$V_{CE} = -5V, I_C = -50mA$ $f = 100MHz$	50	200		MHz
Collector output capacitance	$C_{ob}$	$V_{CE} = -10V, I_C = 0$ $f = 1MHz$		12	30	pF

#### CLASSIFICATION OF $h_{FE(1)}$

Rank	P	Q	R
Range	82-180	120-270	180-390
Marking	AHP	AHQ	AHR