



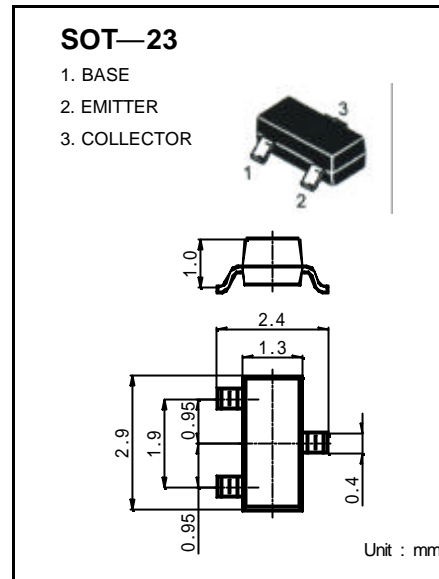
# SHENZHEN ICHN ELECTRONICS TECH. CO., LTD

## SOT-23 Plastic-Encapsulate Transistors

**9012LT1** TRANSISTOR ( PNP )

### FEATURES

- Power dissipation  
 $P_{CM} : 0.3 \text{ W (Tamb=25)}$
- Collector current  
 $I_{CM} : -0.5 \text{ A}$
- Collector-base voltage  
 $V_{(BR)CBO} : -40 \text{ V}$
- Operating and storage junction temperature range  
 $T_J, T_{stg}: -55 \text{ to } +150$



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100 \mu A, I_E = 0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100 \mu A, I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -40V, I_E = 0$			-0.1	$\mu A$
Collector cut-off current	$I_{CEO}$	$V_{CE} = -20V, I_B = 0$			-0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5V, I_C = 0$			-0.1	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE} = -1V, I_C = -50mA$	120		350	
	$h_{FE(2)}$	$V_{CE} = -1V, I_C = -500mA$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$			-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500mA, I_B = -50mA$			-1.2	V
Transition frequency	$f_T$	$V_{CE} = -6V, I_C = -20mA, f = 30MHz$	150			MHz

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

Rank	L	H
Range	120-200	200-350

DEVICE MARKING: 9012LT1=2T1