



## SOT-23 Plastic-Encapsulate Transistors

### S9016LT1 TRANSISTOR (NPN)

#### FEATURES

Power dissipation

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

Collector current

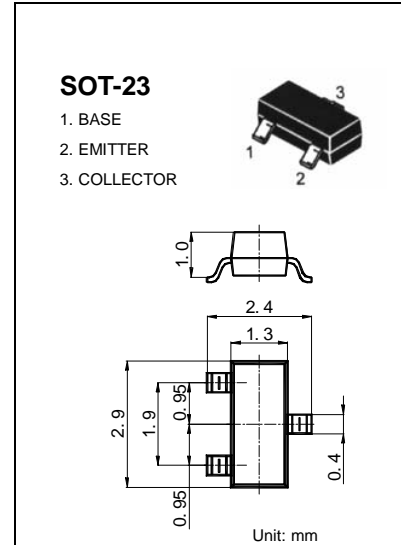
$$I_{CM}: 0.025 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: 30 \text{ V}$$

Operating and storage junction temperature range

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



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu\text{A}, I_E = 0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 0.1\text{mA}, I_B = 0$	20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100\mu\text{A}, I_C = 0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = 30\text{V}, I_E = 0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 3\text{V}, I_C = 0$			0.1	$\mu\text{A}$
DC current gain	$H_{FE(1)}$	$V_{CE} = 5\text{V}, I_C = 1\text{mA}$	70		200	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10\text{mA}, I_B = 1\text{mA}$			0.3	V
Transition frequency	$f_T$	$V_{CE} = 5\text{V}, I_C = 1\text{mA}$ $f = 100\text{MHz}$	300			MHz

DEVICE MARKING	S9016LT1= Y6
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