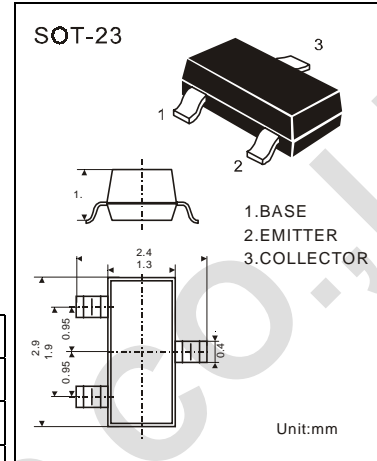


NPN EPITAXIAL SILICON TRANSISTOR

- * Collector Current: $I_c = 150\text{mA}$
- * Collector-Emitter Voltage: $V_{ce} = 50\text{V}$
- * High Total Power Dissipation: $P_c = 225\text{mW}$
- * High H_{fe} And Good Linearity



ABSOLUTE MAXIMUM RATINGS at $T_a = 25^\circ\text{C}$

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{cbo}	60	V
Collector-Emitter Voltage	V_{ceo}	50	V
Collector Current	I_c	150	mA
Collector Dissipation $T_a = 25^\circ\text{C}^*$	P_D	225	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55-150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS at $T_a = 25^\circ\text{C}$

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{cbo}	60			V	$I_c = 100\mu\text{A}$ $I_e = 0$
Collector-Emitter Breakdown Voltage#	BV_{ceo}	50			V	$I_c = 1\text{mA}$ $I_b = 0$
Collector-Base Cutoff Current	I_{cbo}			100	nA	$V_{cb} = 60\text{V}$ $I_e = 0$
DC Current Gain	H_{fe}	70		700		$V_{ce} = 6\text{V}$ $I_c = 1\text{mA}$
Collector-Emitter Saturation Voltage	$V_{ce(sat)}$			0.3	V	$I_c = 100\text{mA}$ $I_b = 10\text{mA}$
Output Capacitance	C_{ob}		2.2	3.5	PF	$V_{cb} = 10\text{V}$ $I_e = 0$ $f = 1\text{MHz}$
Current Gain-Bandwidth Product	f_T		150		MHz	$V_{ce} = 5\text{V}$ $I_c = 10\text{mA}$

* Total Device Dissipation : $FR = 1 \times 0.75 \times 0.062\text{in Board}$, Derate 25°C .

Pulse Test : Pulse Width $\leq 300\mu\text{s}$, Duty cycle $\leq 2\%$

DEVICE MARKING:

2SC945LT1=HF