

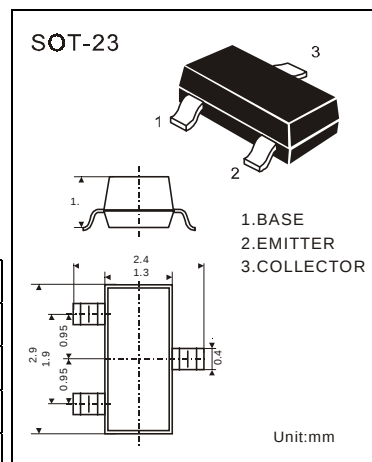
NPN EPITAXIAL SILICON TRANSISTOR

AM/FM IF AMPLIFIER,LOCAL OSCILIATOR OF FM/VHF TUNER

* High Current Gain Bandwidth Product $f_T=1100\text{MHz}$

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{cbo}	30	V
Collector-Emitter Voltage	V_{ceo}	15	V
Emitter-Base Voltage	V_{ebo}	5	V
Collector Current	I_c	50	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}	30			V	$I_c=100\mu\text{A}$ $I_e=0$
Collector-Emitter Breakdown Voltage#	BV_{ceo}	15			V	$I_c=1\text{mA}$ $I_b=0$
Emitter-Base Breakdown Voltage	BV_{ebo}	5			V	$I_e=100\mu\text{A}$ $I_c=0$
Collector-Base Cutoff Current	I_{cbo}			50	nA	$V_{cb}=12\text{V}$ $I_e=0$
DC Current Gain	H_{fe}	28	100	300		$V_{ce}=5\text{V}$ $I_c=1\text{mA}$
Collector-Emitter Saturation Voltage	$V_{ce(sat)}$			0.5	V	$I_c=10\text{mA}$ $I_b=1\text{mA}$
Collector-Base Capacitance	C_{ob}		1.3	1.7	PF	$V_{cb}=10\text{V}$ $I_e=0$ $f=1\text{MHz}$
Current Gain-Bandwidth Product	f_T	700	1100		MHz	$V_{ce}=5\text{V}$ $I_c=5\text{mA}$

* 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:

T9018F=J8