

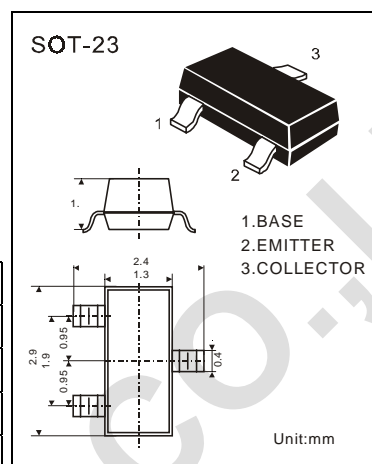
NPN EPITAXIAL SILICON TRANSISTOR

**AM/FM IF AMPLIFIER, LOCAL OSCILLATOR
OF FM/VHF TUNER**

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

ABSOLUTE MAXIMUM RATINGS at Ta=25°C

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	Vcbo	40	V
Collector-Emitter Voltage	Vceo	30	V
Emitter-Base Voltage	Vebo	4.0	V
Collector Current	Ic	20	mA
Collector Dissipation Ta=25°C*	P _D	100	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55-150	°C



ELECTRICAL CHARACTERISTICS at Ta=25°C

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	Bvcbo	40			V	Ic=100uA Ie=0
Collector-Emitter Breakdown Voltage#	Bvceo	30			V	Ic= 1mA Ib=0
Emitter-Base Breakdown Voltage	Bvebo	4.0			V	Ie= 100uA Ic=0
Collector-Base Cutoff Current	Icbo			500	nA	Vcb= 18V Ie=0
Emitter-Base Cutoff Current	Iebo			500	nA	Veb= 4V Ic= 0
DC Current Gain	Hfe	40		200		Vce= 6V Ic= 1mA
Collector-Emitter Saturation Voltage	Vce(sat)			0.40	V	Ic= 10mA Ib= 1mA
Collector-Base Capacitance	Cob		1.3	1.7	PF	Vcb=10V Ie=0 f=1MHZ
Current Gain-Bandwidth Product	f _T		550		MHz	Vce= 6V Ic= 1mA

* Total Device Dissipation : FR=1x0.75x0.062in Board, Derate 25°C.

Pulse Test : Pulse Width ≤300uS, Duty cycle ≤2%