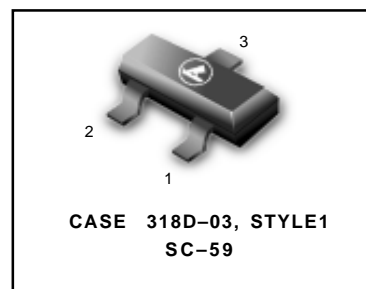
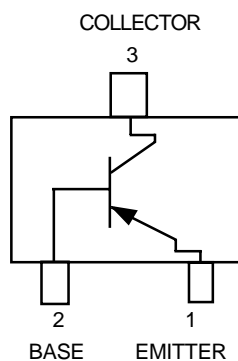


# PNP RF Amplifier Transistor

## Surface Mount

**MSA1022-CT1**



### MAXIMUM RATINGS (T<sub>A</sub> = 25 °C)

Rating	Symbol	Value	Unit
Collector-Base Voltage	V <sub>CBO</sub>	-30	Vdc
Collector-Emitter Voltage	V <sub>CEO</sub>	-20	Vdc
Emitter-Base Voltage	V <sub>EBO</sub>	-5.0	Vdc
Collector Current - Continuous	I <sub>C</sub>	-30	mAdc

### THERMAL CHARACTERISTICS

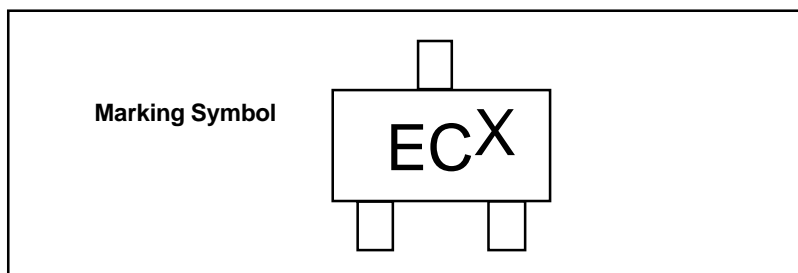
Characteristic	Symbol	Max	Unit
Power Dissipation	P <sub>D</sub>	200	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 ~ +150	°C

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25 °C)

Characteristic	Symbo	I Min	Max	Unit
Collector Cutoff Current (V <sub>CB</sub> = -10 Vdc, I <sub>E</sub> = 0)	I <sub>CBO</sub>	—	-0.1	μAdc
Collector-Emitter Breakdown Voltage (V <sub>CE</sub> = -20 Vdc, I <sub>B</sub> = 0)	I <sub>CEO</sub>	—	-100	μAdc
Emitter-Base Breakdown Voltage (V <sub>EB</sub> = -5.0 Vdc, I <sub>C</sub> = 0)	I <sub>EBO</sub>	—	-10	μAdc
DC Current Gain (1) (V <sub>CE</sub> = -10 Vdc, I <sub>C</sub> = -1.0 mAdc)	h <sub>FE</sub>	110	220	—
Current-Gain - Bandwidth Product (V <sub>CB</sub> = -10 Vdc, I <sub>E</sub> = 1.0 mAdc)	f <sub>T</sub>	150	—	MHz

1. Pulse Test: Pulse Width ≤ 300 μs, D.C. ≤ 2%.

### DEVICE MARKING



The "X" represents a smaller alpha digit Date Code. The Date Code indicates the actual month in which the part was manufactured.