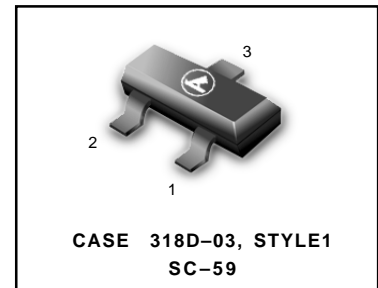
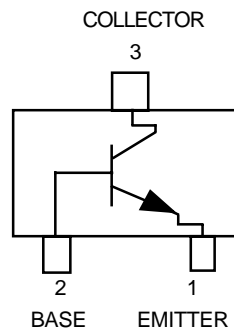


# NPN RF Amplifier Transistors

## Surface Mount

**MSC2295-BT1**  
**MSC2295-CT1**



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

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

### THERMAL CHARACTERISTICS

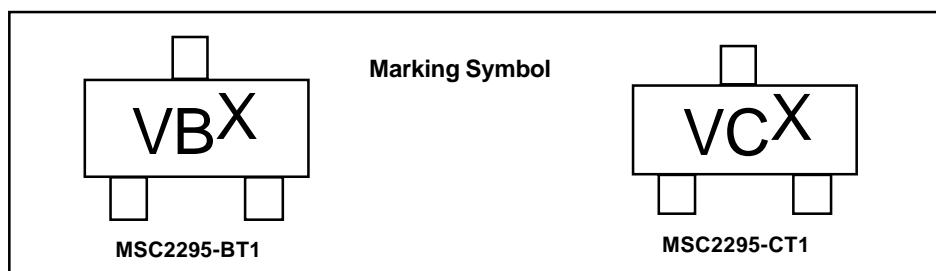
Characteristic	Symbol	Max	Unit
Power Dissipation	P <sub>D</sub>	200	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 ~ +150	°C

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

Characteristic	Symbol	Min	Max	Unit
Collector-Base Cutoff Current (V <sub>CB</sub> = 10 Vdc, I <sub>E</sub> = 0)	I <sub>CBO</sub>	—	0.1	μAdc
DC Current Gain <sup>(1)</sup> (V <sub>CB</sub> = 10 Vdc, I <sub>C</sub> = -1.0 mAdc)	MSC2295-BT1 MSC2295-CT1	70 110	140 220	—
Collector-Gain - Bandwidth Product (V <sub>CB</sub> = 10 Vdc, I <sub>E</sub> = -1.0 mAdc)	f <sub>T</sub>	150	—	MHz
Reverse Transistor Capacitance (V <sub>CE</sub> = 10 Vdc, I <sub>C</sub> = 1.0 mAdc, f = 10.7 MHz)	C <sub>re</sub>	—	1.5	pF

1. Pulse Test: Pulse Width ≤ 300 ms, 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.