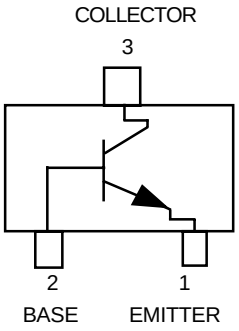
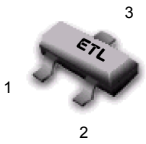
ETL SEMICONDUCTOR

NPN RF Amplifier Transistors
Surface Mount

MSC2295-BT1
MSC2295-CT1





CASE 318D–03, STYLE1
SC–59

MAXIMUM RATINGS (T_A = 25°C)

Rating	Symbol	Value	Unit
Collector-Base Voltage	$V_{(BR)CBO}$	30	Vdc
Collector-Emitter Voltage	$V_{(BR)CEO}$	20	Vdc
Emitter-Base Voltage	$V_{(BR)EBO}$	5.0	Vdc
Collector Current - Continuous	I_C	30	mAdc

THERMAL CHARACTERISTICS

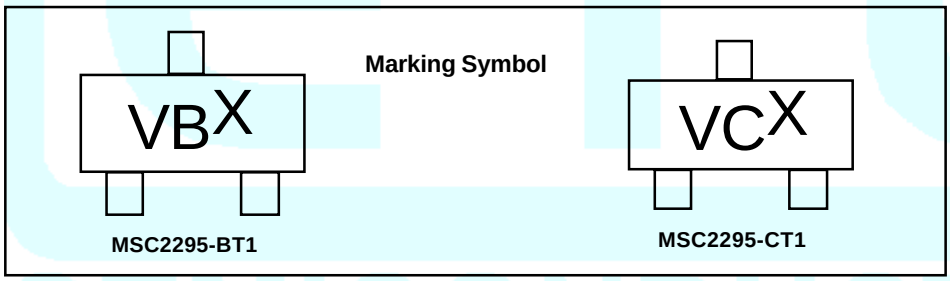
Characteristic	Symbol	Max	Unit
Power Dissipation	P_D	200	mW
Junction Temperature	T_J	150	℃
Storage Temperature	T_{stg}	-55 ~ +150	℃

ELECTRICAL CHARACTERISTICS (T_A = 25°C)

Characteristic		Symbol	Min	Max	Unit
Collector-Base Cutoff Current (V_{CB} = 10 Vdc, I_E = 0)		I_{CBO}	—	0.1	μAdc
DC Current Gain [1] (V_{CB} = 10 Vdc, I_C = –1.0 mAdc)		h_{FE}			—
	MSC2295-BT1		70	140	
	MSC2295-CT1		110	220	
Collector-Gain - Bandwidth Product (V_{CB} = 10 Vdc, I_E = –1.0 mAdc)		f_T	150	—	MHz
Reverse Transistor Capacitance (V_{CE} = 10 Vdc, I_C = 1.0 mAdc, f = 10.7 MHz)		C_{re}	—	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.