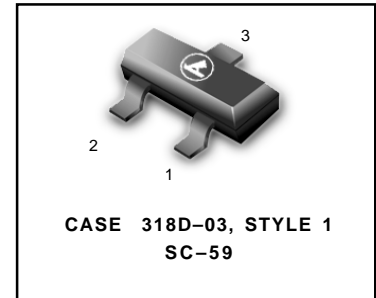
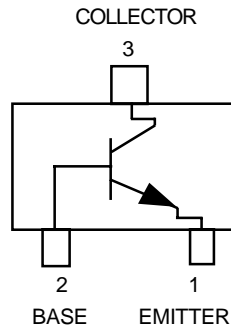


NPN RF Amplifier Transistor

Surface Mount

MSC3130T1



MAXIMUM RATINGS (T_A = 25 °C)

Rating	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	15	Vdc
Collector-Emitter Voltage	V _{CEO}	10	Vdc
Emitter-Base Voltage	V _{EBO}	3.0	Vdc
Collector Current - Continuous	I _C	50	mAdc

THERMAL CHARACTERISTICS

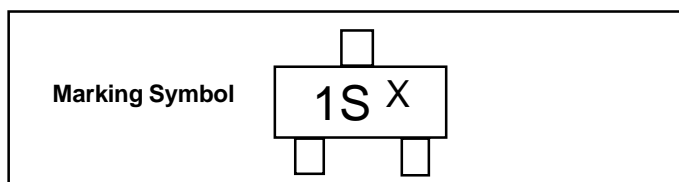
Characteristic	Symbol	Max	Unit
Power Dissipation	P _D	200	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (T_A = 25 °C)

Characteristic	Symbol	Min	Max	Unit
Collector Cutoff Current (V _{CB} = 10 Vdc, I _E = 0)	I _{CBO}	—	1.0	μAdc
Collector-Emitter Breakdown Voltage (I _C = 2.0 mAdc, I _B = 0)	V _{CEO}	10	—	Vdc
Emitter-Base Breakdown Voltage (I _E = 10 μAdc, I _C = 0)	V _{EBO}	3.0	—	Vdc
DC Current Gain ⁽¹⁾ (V _{CE} = 4.0 Vdc, I _C = 5.0 mAdc)	h _{FE}	75	400	—
Collector-Emitter Saturation Voltage (I _C = 20 mAdc, I _B = 4.0 mAdc)	V _{CE(sat)}	—	0.5	Vdc
Current-Gain-Bandwidth Product (V _{CB} = 4.0 Vdc, I _E = -5.0 mAdc)	tf _T	1.4	2.5	GHz

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.