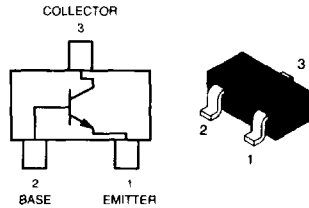


# MSC2404-CT1★

CASE 318D-03, STYLE 1



**SC-59 PACKAGE  
NPN RF AMPLIFIER  
TRANSISTOR  
SURFACE MOUNT**

**\*This is a Motorola  
designated preferred device.**

## 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>	3	Vdc
Collector Current-Continuous	I <sub>C</sub>	15	mAdc

## THERMAL CHARACTERISTICS

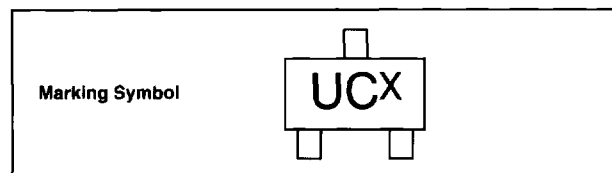
Rating	Symbol	Max	Unit
Power Dissipation	P <sub>D</sub>	150	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 -- + 150	°C

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

Characteristic	Symbol	Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = 10 μA, I <sub>E</sub> = 0	30	—	Vdc
Collector Emitter Breakdown Voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = 10 μA, I <sub>C</sub> = 0	3	—	Vdc
DC Current Gain	h <sub>FE</sub> *	V <sub>CB</sub> = 6 V, I <sub>E</sub> = -1 mA	65	160	—
Current-Gain — Bandwidth Product	f <sub>T</sub>	V <sub>CB</sub> = 6 V, I <sub>E</sub> = -1 mA	450	—	MHz
Reverse Transfer Capacitance	C <sub>re</sub>	V <sub>CE</sub> = 6 V, I <sub>C</sub> = 1 mA, f = 10.7 MHz	—	1	pF

\*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.