




**DESCRIPTION**

The MMR5179LT1 is a low noise, high gain, discrete silicon bipolar transistors housed in low cost plastic packages.

**KEY FEATURES**

-  High FTau-1.4GHz
-  Low noise-4.5dB@200MHz
-  Low cost SOT23 package

**IMPORTANT:** For the most current data, consult MICROSEMI's website: <http://www.microsemi.com>

**ABSOLUTE MAXIMUM RATINGS (T<sub>case</sub> = 25°C)**

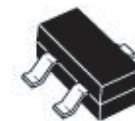
Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	20	V
V <sub>CEO</sub>	Collector-Emitter Voltage	12	V
V <sub>EBO</sub>	Emitter-Base Voltage	2.5	V
I <sub>C</sub>	Device Current	50	mA
P <sub>DISS</sub>	Power Dissipation	375	mW
T <sub>J</sub>	Junction Temperature	150	C
T <sub>STG</sub>	Storage Temperature	-55 to +150	C

**APPLICATIONS/BENEFITS**

-  LNA, Oscillator, Pre-Driver

**THERMAL DATA**

R <sub>TH(j-c)</sub>	Junction-Case Thermal Resistance	200	C/W
----------------------	----------------------------------	-----	-----



SOT-23  
MMBR5179LT1

**STATIC ELECTRICAL SPECIFICATIONS (T<sub>case</sub> = 25°C)**

Symbol	Test Conditions				Units
		Min.	Typ.	Max.	
BV <sub>CBO</sub>	I <sub>C</sub> = .01mA I <sub>E</sub> = 0	20			V
BV <sub>CEO</sub>	I <sub>C</sub> = 3mA I <sub>B</sub> = 0	12			V
I <sub>CBO</sub>	V <sub>EB</sub> = 15V I <sub>E</sub> = 0			0.02	uA
h <sub>FE</sub>	V <sub>CB</sub> = 1 V I <sub>C</sub> = 3 mA	25			

**DYNAMIC ELECTRICAL SPECIFICATIONS (T<sub>case</sub> = 25°C)**

Symbol	Test Conditions				Units
		Min.	Typ.	Max.	
C <sub>CB</sub>	V <sub>CB</sub> = 10 V f = 1.0 MHz			1.0	pF
FTau	V <sub>CE</sub> = 6 V I <sub>C</sub> = 5 mA f = 200MHz		1.4		GHz
NF	V <sub>CE</sub> = 6 V I <sub>C</sub> = 1.5 mA f = 200MHz		4.5		dB
G <sub>pe</sub>	V <sub>CE</sub> = 6 V I <sub>C</sub> = 5 mA f = 200MHz		14		dB