

DESCRIPTION

The MMBR5179LT1 is a low noise, high gain, discrete silicon bipolar transistors housed in low cost plastic packages.

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

KEY FEATURES

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

ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°C)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	20	V
V _{CEO}	Collector-Emitter Voltage	12	V
V _{EBO}	Emitter-Base Voltage	2.5	V
I _C	Device Current	50	mA
P _{DISS}	Power Dissipation	375	mW
T _J	Junction Temperature	150	°C
T _{STG}	Storage Temperature	-55 to +150	°C

THERMAL DATA

R _{TH(j-c)}	Junction-Case Thermal Resistance	200	C/W
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APPLICATIONS/BENEFITS

- ✎ LNA, Oscillator, Pre-Driver



SOT-23
MMBR5179LT1

STATIC ELECTRICAL SPECIFICATIONS (T_{case} = 25 °C)

Symbol	Test Conditions	Min.	Typ.	Max.	Units
BV _{CBO}	I _C = .01mA I _E = 0	20			V
BV _{CEO}	I _C = 3mA I _B = 0	12			V
I _{CBO}	V _{EB} = 15V I _E = 0			0.02	uA
h _{FE}	V _{CB} = 1 V I _C = 3 mA	25			

DYNAMIC ELECTRICAL SPECIFICATIONS (T_{case} = 25 °C)

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