



MMBR911LT1

RF & MICROWAVE TRANSISTORS

DESCRIPTION

The MMBR911LT1 is a low noise, high gain, discrete silicon bipolar transistors housed in low cost plastic packages.

IMPORTANT: For the most current data, visit: <http://www.advancedpower.com>

KEY FEATURES

- ✓ High FTau-6.0 GHz
- ✓ Low noise-2.9dB@1GHz
- ✓ Low cost SOT23 package

ABSOLUTE MAXIMUM RATINGS ($T_{CASE} = 25^\circ\text{C}$)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	20	V
V_{CEO}	Collector-Emitter Voltage	12	V
V_{EBO}	Emitter-Base Voltage	2.0	V
I_C	Device Current	60	mA
P_{DISS}	Power Dissipation	333	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	225	C/W
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APPLICATIONS/BENEFITS

- ✓ LNA, Oscillator, Pre-Driver



SOT-23
MMBR911LT1

STATIC ELECTRICAL SPECIFICATIONS ($T_{CASE} = 25^\circ\text{C}$)

Symbol	Test	Conditions				Units
			Min.	Typ.	Max.	
BV_{CBO}	$I_C = .1\text{mA}$	$I_E = 0$	20			V
BV_{CEO}	$I_C = 1.0\text{mA}$	$I_B = 0$	12			V
I_{CBO}	$V_{CB} = 15\text{V}$	$I_E = 0$			50	nA
h_{FE}	$V_{CE} = 10\text{V}$	$I_C = 30\text{mA}$	30		200	

DYNAMIC ELECTRICAL SPECIFICATIONS ($T_{CASE} = 25^\circ\text{C}$)

Symbol	Test	Conditions				Units
			Min.	Typ.	Max.	
C_{CB}	$V_{CB} = 10\text{ V}$	$f = 1.0\text{ MHz}$		1.0		pF
$FTau$	$V_{CE} = 10\text{ V}$	$I_C = 30\text{ mA}$	$f = 1.0\text{ GHz}$	6.0		GHz
NF_{min}	$V_{CE} = 10\text{ V}$	$I_C = 10\text{ mA}$	$f = 1.0\text{ GHz}$	2.9		dB
G_{NF}	$V_{CE} = 10\text{ V}$	$I_C = 10\text{ mA}$	$f = 1.0\text{ GHz}$	11		dB