




DESCRIPTION

The BFR92ALT1 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-4.5GHz
-  Low noise-3.0dB@500MHz
-  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	15	V
V _{EBO}	Emitter-Base Voltage	2.0	V
I _C	Device Current	25	mA
P _{DISS}	Power Dissipation	273	mW
T _J	Junction Temperature	150	C
T _{STG}	Storage Temperature	-55 to +150	C

APPLICATIONS/BENEFITS

-  LNA, Oscillator, Pre-Driver

THERMAL DATA

R _{TH(j-c)}	Junction-Case Thermal Resistance	275	C/W
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SOT-23
BFR92ALT1

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

Symbol	Test Conditions				Units
		Min.	Typ.	Max.	
BV _{CBO}	I _C = .1mA I _E = 0	20			V
BV _{CEO}	I _C = 10mA I _B = 0	15			V
I _{CBO}	V _{CB} = 10V I _E = 0			50	nA
h _{FE}	V _{CB} = 10V I _C = 14mA	40			

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

Symbol	Test Conditions				Units
		Min.	Typ.	Max.	
C _{CB}	V _{CB} = 10 V f = 1.0 MHz		0.7		pF
FTau	V _{CE} = 10 V I _C = 14 mA f = 500MHz		4.5		GHz
NF	V _{CE} = 1.5 V I _C = 3.0 mA f = 500MHz		3.0		dB