

## BFS17A

NPN Bipolar Silicon RF Transistor in plastic package SOT23

Attribute	Value	UOM
Configuration	NPN	
Function	RF	
Package	SOT23	
$V_{CEO\ max}$	15	V
$V_{CBO\ max}$	25	V
$V_{EBO\ max}$	2.5	V
$I_C\ max$	25	mA
$P_{tot\ max}$	200	mW
DC current gain	min	20
	@ $I_E$	2 mA
	@ $V_{CE}$	1 V
Transition frequency	typ	3.2 GHz
	@ $I_E$	30 mA
	@ $V_{CE}$	5 V
	@f	300 MHz
Power gain	$G_P\ typ$	13 dB
	@ $I_E$	14 mA
	@ $V_{CE}$	10 V
	@f	800 MHz
Noise figure	$F_{typ}$	2.5 dB
	@ $I_E$	2 mA
	@ $V_{CE}$	5 V
	@f	800 MHz

## BFR92

NPN Bipolar Silicon RF Transistor in plastic package SOT23

Attribute		Value	UOM
Configuration		NPN	
Function		RF	
Package		SOT23	
$V_{CE0 \text{ max}}$		15	V
$V_{CBO \text{ max}}$		20	V
$V_{EBO \text{ max}}$		2.0	V
$I_C \text{ max}$		30	mA
$P_{\text{tot max}}$		200	mW
DC current gain	min	25	
	@ $I_E$	14	mA
	@ $V_{CE}$	10	V
Transition frequency	typ	5.0	GHz
	@ $I_E$	14	mA
	@ $V_{CE}$	10	V
	@ f	300	MHz
Power gain	$G_P \text{ typ}$	14	dB
	@ $I_E$	14	mA
	@ $V_{CE}$	10	V
	@ f	800	MHz
Noise figure	$F_{\text{typ}}$	2.2	dB
	@ $I_E$	2	mA
	@ $V_{CE}$	10	V
	@ f	500	MHz

## BFR92A

NPN Bipolar Silicon RF Transistor in plastic package SOT23

Attribute		Value	UOM
Configuration		NPN	
Function		RF	
Package		SOT23	
V <sub>CEO max</sub>		15	V
V <sub>CBO max</sub>		20	V
V <sub>EBO max</sub>		2.0	V
I <sub>C max</sub>		30	mA
P <sub>tot max</sub>		200	mW
DC current gain	min	65	
	@ I <sub>E</sub>	14	mA
	@ V <sub>CE</sub>	10	V
Transition frequency	typ	6.0	GHz
	@ I <sub>E</sub>	14	mA
	@ V <sub>CE</sub>	10	V
	@ f	300	MHz
Power gain	G <sub>P typ</sub>	16	dB
	@ I <sub>E</sub>	14	mA
	@ V <sub>CE</sub>	10	V
	@ f	800	MHz
Noise figure	F <sub>typ</sub>	1.8	dB
	@ I <sub>E</sub>	2	mA
	@ V <sub>CE</sub>	10	V
	@ f	800	MHz

## BFR93

NPN Bipolar Silicon RF Transistor in plastic package SOT23

Attribute		Value	UOM
Configuration		NPN	
Function		RF	
Package		SOT23	
V <sub>CEO max</sub>		12	V
V <sub>CBO max</sub>		20	V
V <sub>EBO max</sub>		2.0	V
I <sub>C max</sub>		40	mA
P <sub>tot max</sub>		200	mW
DC current gain	min	25	
	@ I <sub>E</sub>	30	mA
	@ V <sub>CE</sub>	5	V
Transition frequency	typ	5.0	GHz
	@ I <sub>E</sub>	30	mA
	@ V <sub>CE</sub>	5	V
	@ f	300	MHz
Power gain	G <sub>P typ</sub>	13	dB
	@ I <sub>E</sub>	30	mA
	@ V <sub>CE</sub>	5	V
	@ f	800	MHz
Noise figure	F <sub>typ</sub>	1.9	dB
	@ I <sub>E</sub>	4	mA
	@ V <sub>CE</sub>	5	V
	@ f	500	MHz

# BFR93A

NPN Bipolar Silicon RF Transistor in plastic package SOT23

Attribute	Value	UOM
Configuration	NPN	
Function	RF	
Package	SOT23	
V <sub>CEO max</sub>	12	V
V <sub>CBO max</sub>	20	V
V <sub>EBO max</sub>	2.0	V
I <sub>C max</sub>	50	mA
P <sub>tot max</sub>	200	mW
DC current gain	h <sub>FE min</sub>	40
	h <sub>FE max</sub>	150
	@ I <sub>E</sub>	30 mA
	@ V <sub>CE</sub>	5 V
Transition frequency	f <sub>T typ</sub>	6.0 GHz
	@ I <sub>E</sub>	30 mA
	@ V <sub>CE</sub>	5 V
	@ f	300 MHz
Power gain	G <sub>P typ</sub>	14 dB
	@ I <sub>E</sub>	30 mA
	@ V <sub>CE</sub>	5 V
	@ f	800 MHz
Noise figure	F <sub>typ</sub>	1.6 dB
	@ I <sub>E</sub>	5 mA
	@ V <sub>CE</sub>	8 V
	@ f	800 MHz