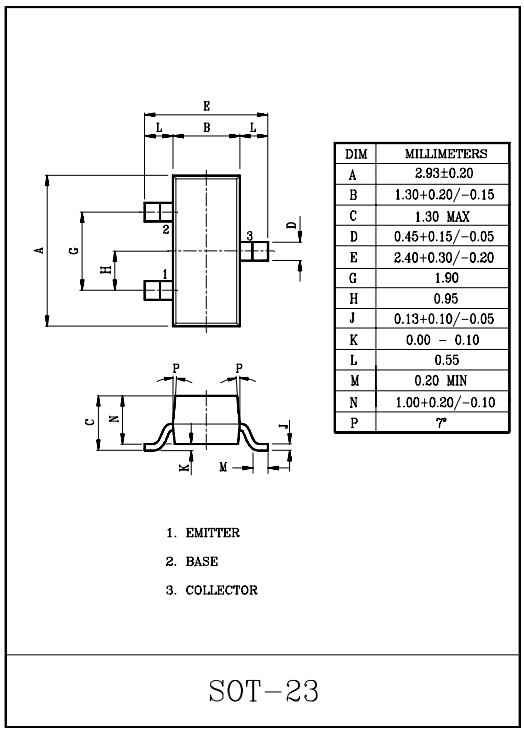
BFS20/BF599

EPITAXIAL PLANAR NPN TRANSISTOR

HIGH FREQUENCY APPLICATION.
VHF BAND AMPLIFIER APPLICATION.



DIM	MILLIMETERS
A	2.93±0.20
B	1.30+0.20/−0.15
C	1.30 MAX
D	0.45+0.15/−0.05
E	2.40+0.30/−0.20
G	1.90
H	0.95
J	0.13+0.10/−0.05
K	0.00 − 0.10
L	0.55
M	0.20 MIN
N	1.00+0.20/−0.10
P	7°

SOT-23

MAXIMUM RATINGS (Ta=25℃)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	40	V
Collector-Emitter Voltage		V_{CEO}	25	V
Emitter-Base Voltage	BFS20	V_{EBO}	4	V
	BF599		5	
Collector Current		I_C	25	mA
Emitter Current		I_E	-25	mA
Collector Power Dissipation		P_C	200	mW
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-65~150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage	BFS20	$V_{(BR)CBO}$	I_C=10μA, I_E=0	40	-	-	V
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	I_C=2mA, I_B=0	25	-	-	V
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	I_E=10μA, I_C=0	4.0	-	-	V
Collector Cut-off Current	BFS20	I_{CBO}	V_{CB}=20V, I_E=0	-	-	100	nA
			V_{CB}=20V, I_E=0, Ta=150℃	-	-	10	μA
	BF599		V_{CB}=40V, I_E=0	-	-	100	nA
DC Current Gain		h_{FE}	V_{CE}=10V, I_C=7mA	40	-	-	-
Base-Emitter Voltage	BFS20	$V_{BE(ON)}$	V_{CE}=10V, I_C=7mA	-	750	900	mV
	BF599			-	750	-	
Transition Frequency	BFS20	f_T	V_{CE}=10V, I_C=7mA, f=100MHz	275	550	-	MHz
	BF599			-	550	-	
Collector Output Capacitance		C_{ob}	V_{CB}=10V, f=1MHz, I_E=0	-	0.35	-	pF

MARK SPEC

TYPE	MARK
BFS20	G1
BF599	G2

Marking