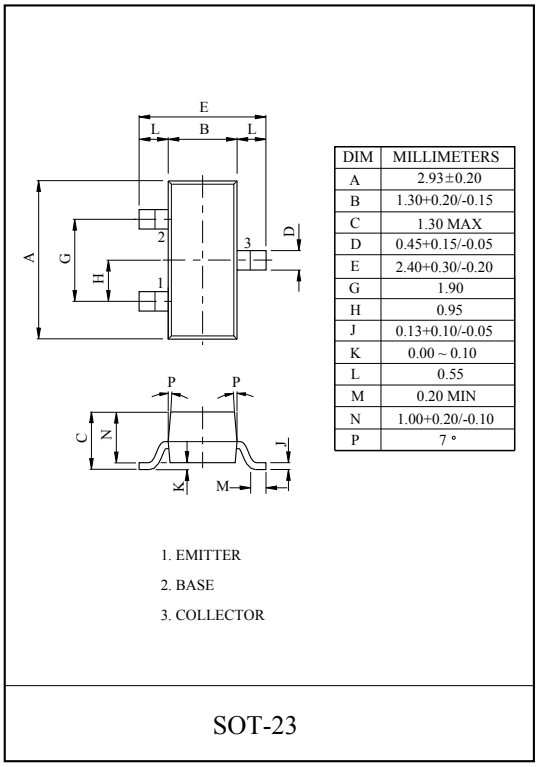
BFS20/BF599

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 RATING (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	℃

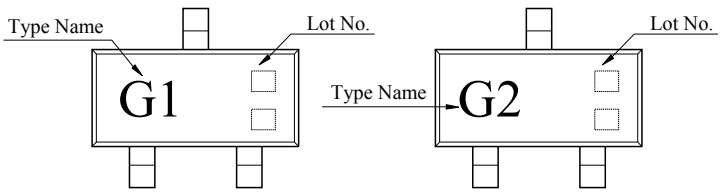
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage		$V_{(BR)CBO}$	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	BFS20	$V_{(BR)EBO}$	I_E=10μA, I_C=0	4	-	-	V
	BF599			5			
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



littlediode
COMPONENTS FOR ALL

Littlediode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.