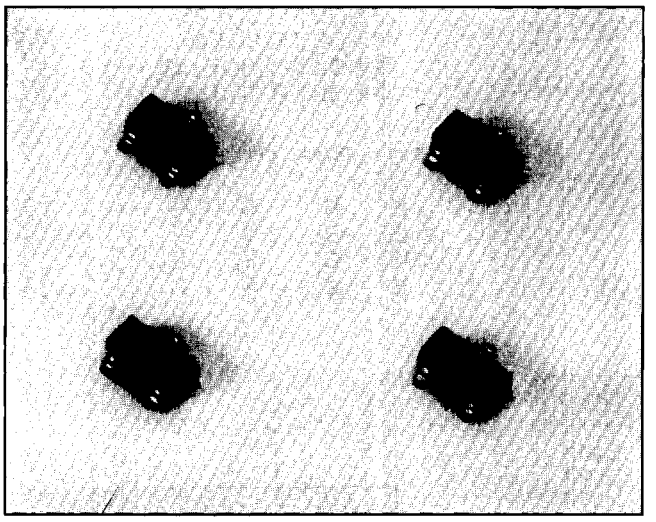


High Frequency SMD® Transistors

Description

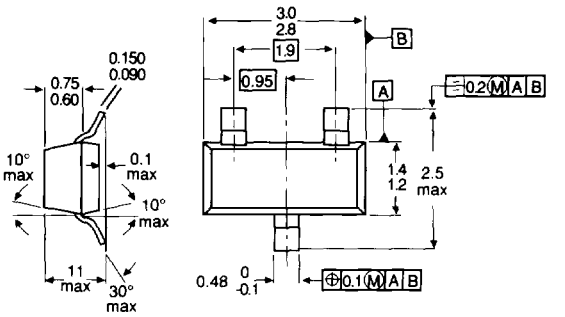
Philips Components high-frequency transistors fill the gap between general purpose transistors and wideband transistors by offering transition frequencies from a few hundred megahertz to about 1 gigahertz. Applications include IF preamplifiers, oscillators for VHF/UHF tuners, and RF stages for FM front ends.

Features

- Typical feedback capacitances as low as 0.1 pF
- Transition frequencies up to 1.3 GHz
- Typical noise figures from 2-4.5 dB
- Complementary NPN and PNP devices

Mechanical Data

(Dimensions in mm)

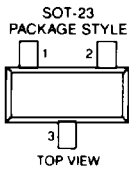


SOT-23 TOP VIEW

Electrical Specifications

Type	Package	Ratings			h_{FE}		NF		f_T	C_{re}	Pinout
		V_{CEO} V	V_{CBO} V	I_C mA	Min./Max. at	I_C/V_{CE} mA/V	Typ. at dB	I_C mA	Typ. MHz	Typ. pF	
NPN											
BFS18	SOT-23	20	30	30	35/125	1/10	4	1	200	0.85	F
BFS19	SOT-23	20	30	30	65/225	1/10	4	1	260	0.85	F
BFS20	SOT-23	20	30	25	40/–	7/10	—	—	450	0.35	F
BF747	SOT-23	20	30	50	40/250	2/10	—	—	1200	—	F
BF840	SOT-23	40	40	25	—	—	1.5	1	380	0.3	F
BF841	SOT-23	40	40	25	—	—	2.0	1	380	0.3	F
PMBTH10	SOT-23	25	30	—	60/—	4/10	—	—	> 0.65	0.3	F
PMBTH81	SOT-23	20	20	—	60/—	5/10	—	—	> 0.6	—	F
PNP											
BF579	SOT-23	20	20	25	20/–	10/10	4.5	10	1350	0.46	F
BF536	SOT-23	30	30	25	25/–	1/10	5	1	350	—	F
BF767	SOT-23	30	30	20	15/–	3/10	4	3	900	0.3	F
BF824	SOT-23	30	30	25	—	—	3	2	440	0.1	F
BF660	SOT-23	30	40	25	30/–	3/10	—	—	650	0.65	F
BF569N	SOT-23	35	40	30	25/–	3/10	4.5	3	900	0.33	F
BF550	SOT-23	40	40	35	50/–	1/10	2	1	325	0.5	F

Pinout Diagram



PINOUT F: SOT-23

PIN 1	PIN 2	PIN 3
E	B	C

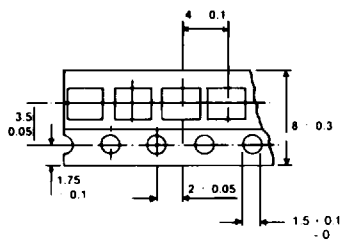
Marking Codes

Type No.	Code	Type No.	Code	Type No.	Code	Type No.	Code
BF536	G3p	BF660	LEp	BF824	F8p	BFS18	F1p
BF550	LAp	BF747	E15	BF840	NCp	BFS19	F2p
BF569	LHp	BF767	G9p	BF841	NDp	BFS20	G1p
BF579	LJp						

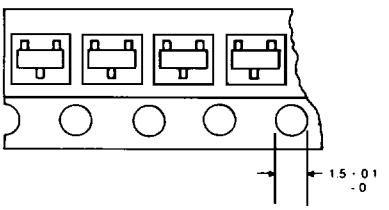
Tape and Reel Specifications

(Dimensions in mm)

SM Package	Devices per Reel	Reel Size (in)	Tape Width (mm)	Ordering Suffix
SOT-23	3K	7	8	TRL
	10K	13	8	TRL 13



SOT-23
Tape Dimensions



SOT-23
Orientation