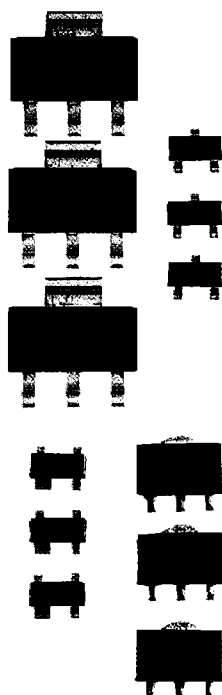


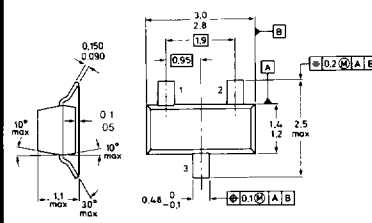
DESCRIPTION

FEATURES

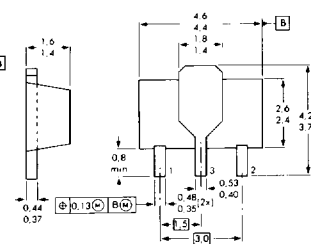
- MECHANICAL DATA**
(Dimensions in mm)



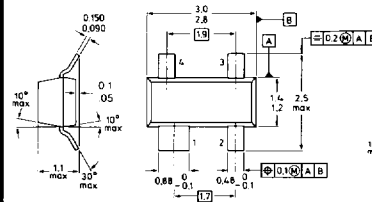
SOT-23 TOP VIEW



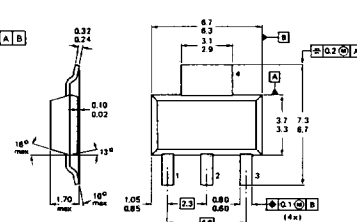
SOT-89 **BOTTOM VIEW**



SOT-143 TOP VIEW



SOT-223



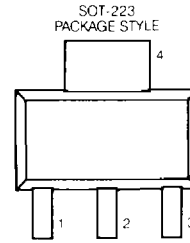
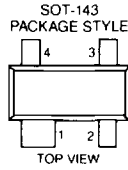
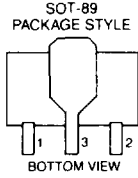
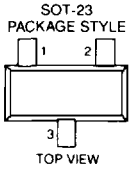
BROADBAND SMD TRANSISTORS

ELECTRICAL SPECIFICATIONS

TYPE	PACKAGE	RATINGS			hFE		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 I _C dB mA		typ. GHz _z	typ. pF	
NPN											
BFT25	SOT-23	5	8	6.5	20/-	1/1	3.8	1	2.3	0.45	F
BFR53	SOT-23	10	18	50	25/-	50/5	5.0	2	2.0	0.9	F
BFG67	SOT-143	10	20	50	60/-	15/5	2.5	5	7.5	0.5	Q
BFG97	SOT-223	10	20	100	25/90	70/10	—	—	5.5	1.0	S
BFQ67	SOT-23	10	20	50	100typ	15/5	2.5	5	7.5	0.5	F
BFR93	SOT-23	12	15	35	25/-	30/5	1.9	2	5.0	0.8	F
BFR93A	SOT-23	12	15	35	40/-	3-/5	1.6	4	5.0	0.6	F
BFQ19	SOT-89	15	20	75	25/-	75/10	3.3	50	5.0	1.3	F
BFR92	SOT-23	15	20	25	25/-	14/10	2.4	2	5.0	0.7	F
BFR92A	SOT-23	15	20	25	40/-	14/10	1.8	4	5.0	0.35	F
BFQ18A	SOT-89	15	20	150	25/-	100/10	—	—	3.6	1.2	F
BFS17	SOT-23	15	25	25	20/150	2/1	4.5	2	1.3	0.65	F
BFS17A	SOT-23	15	25	35	20/-	2/1	2.5	2	2.8	0.6	F
BFG17A	SOT-143	15	25	25	20/150	2/1	2.5	2	2.8	0.6	Q
BFG35	SOT-223	18	25	150	25/140	100/10	—	—	4.0	1.2	S
BFQ17	SOT-89	25	40	150	25/-	150/5	—	—	1.2	1.9	F
BFG16A	SOT-223	25	40	300	25/-	150/5	6 max	30	1.2	1.7	S
BFG33	SOT-143	7	9	20	25/-	14/5	2.5	5	12	—	Q
BFG92A	SOT-143	15	20	25	40/-	14/10	—	—	5	0.35	Q
BFG93A	SOT-143	12	15	35	40/-	30/5	—	—	6	0.6	Q
BFG135	SOT-223	15	25	150	80/-	100/10	—	—	7	1.2	S
BFG197	SOT-143	10	20	100	40/-	50/5	—	—	7.5	0.85	Q
BFG198	SOT-223	10	20	100	40/-	50/5	—	—	8	0.8	S
BFR106	SOT-23	15	20	100	25/-	20/8	—	—	3.3	1.2	S
PNP											
BFT93	SOT-23	12	15	35	20/-	30/5	2.4	2	5	1.0	F
BFT92	SOT-23	15	20	25	20/-	14/10	2.7	2	5	0.7	F
BFQ149	SOT-89	15	20	75	20/-	50/10	3.75	50	4.4	0.35	F
BFG31	SOT-223	15	20	100	25/-	70/10	—	—	5	1.6	S
BFG55	SOT-223	18	25	150	25 typ	100/10	—	—	4	1.7	S

BROADBAND SMD TRANSISTORS

PINOUT DIAGRAMS



PINOUT F: SOT-23
PINOUT F: SOT-89
PINOUT Q: SOT-143
PINOUT S: SOT-223

PIN 1	PIN 2	PIN 3	PIN 4
E	B	C	—
E	B	C	—
C	B	E	E
E	B	E	C

MARKING CODES

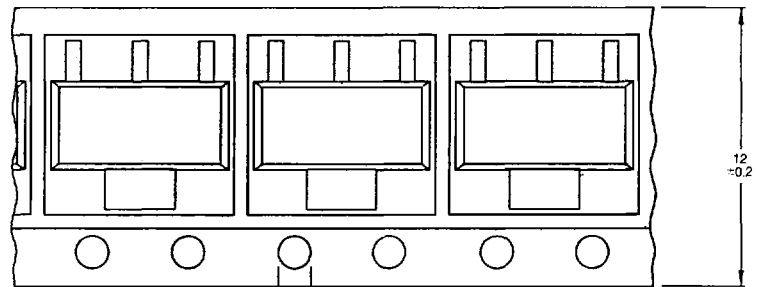
Type No.	Code	Type No.	Code	Type No.	Code	Type No.	Code
BFG16A	*	BFG93A	R8	BFQ67	V2	BFS17	E1
BFG17A	E6	BFG97	*	BFQ149	V2	BFS17A	E2
BFG31	*	BFG135	*	BFR53	N1	BFT25	V1
BFG33	V6	BFG197	V5	BFR92	P1	BFT92	W1
BFG35	*	BFG198	*	BFR92A	P2	BFT93	X1
BFG55	*	BFQ17	FA	BFR93	R1		
BFQ67	V8	BFQ18A	FF	BFR93A	R2		
BFG92A	P8	BFQ19	FB	BFR106	R7		

*See individual device data sheet

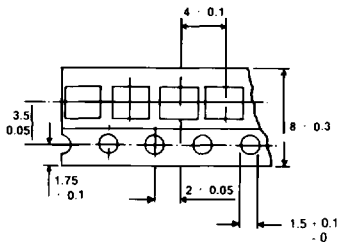
TAPE AND REEL SPECIFICATIONS

(Dimensions in mm)

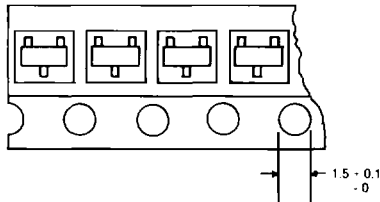
SM Package	Devices per reel	Reel Size (in)	Tape Width (mm)	Ordering Suffix
SOT-23	3K	7	8	TRL
	10K	13	8	TRL 13
SOT-89	1K	7	12	TRL
	4K	13	12	TRL 13
SOT-143	3K	7	8	TRL
	10K	13	8	TRL 13
SOT-223	1K	7	12	TRL
	4K	13	12	TRL 13



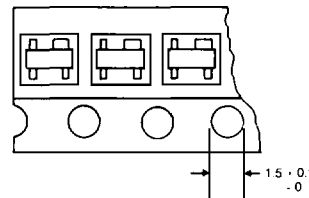
SOT-223 TAPE DIMENSIONS AND ORIENTATION



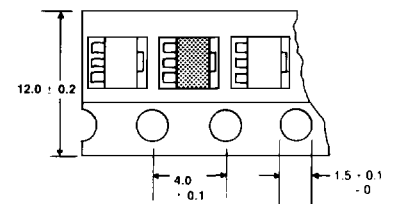
**SOT-23 and SOT-143
TAPE DIMENSIONS**



**SOT-23
ORIENTATION**



**SOT-143
ORIENTATION**



**SOT-89
TAPE DIMENSIONS AND ORIENTATION**