

LOW NOISE SMD TRANSISTORS

DESCRIPTION

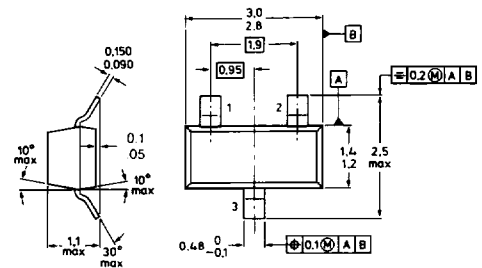
■ Philips Components low-noise transistors are optimized for operation on low level signals as required by audio and other amplifier circuits. All have guaranteed low-current specifications for noise, gain and saturation voltages.

FEATURES

- Typical noise figures as low as 1 dB at 200 μ A
- DC gain specified at test limits as low as 10 μ A
- Complementary NPN and PNP devices
- Compatible with wave or reflow soldering

MECHANICAL DATA

(Dimensions in mm)



SOT-23 TOP VIEW

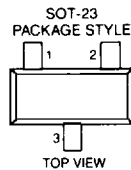


LOW NOISE SMD TRANSISTORS

ELECTRICAL SPECIFICATIONS

TYPE	PACKAGE	RATINGS			NF		hFE		V _{CE(sat)}		f _T	PINOUT
		V _{CEO} V	V _{CB0} V	I _C mA	typ. at I _C dB	at I _C μA	min./max. at I _C /V _{CE} mA/V	max. at I _C /I _B mA/mA	V	mA/mA	typ. MHz	
NPN												
PMBT5089	SOT-23	25	30	50	1.2	100	400/-	10/5	0.5	10/1	100	F
BC849B	SOT-23	30	30	200	1.2	200	200/450	2/5	0.25	10/0.5	300	F
BC849C	SOT-23	30	30	200	1.2	200	420/800	2/5	0.25	10/0.5	300	F
PMBT5088	SOT-23	30	35	50	1.0	100	300/-	10/5	0.5	10/1	100	F
BCF32	SOT-23	32	32	100	1.2	200	200/450	2/5	0.25	10/0.5	300	F
BCF33	SOT-23	32	32	100	1.2	200	420/800	2/5	0.25	10/0.5	300	F
BC850B	SOT-23	45	50	200	1.0	200	200/450	2/5	0.25	10/0.5	300	F
BC850C	SOT-23	45	50	200	1.0	200	420/800	2/5	0.25	10/0.5	300	F
BCF81	SOT-23	45	50	100	1.2	200	420/800	2/5	0.25	10/0.5	300	F
PMBT6429	SOT-23	45	55	200	0.5	100	500/-	10/5	0.2	10/0.5	100	F
PMBT6428	SOT-23	50	60	200	0.5	100	250/-	10/5	0.2	10/0.5	100	F
PNP												
BC859A	SOT-23	30	30	100	1.2	200	125/250	2/5	0.3	10/0.5	150	F
BC859B	SOT-23	30	30	100	1.2	200	220/475	2/5	1.0	10/0.5	150	F
BC859C	SOT-23	30	30	100	1.2	200	420/800	2/5	0.3	10/0.5	150	F
BCF29	SOT-23	32	32	100	1.0	200	120/260	2/5	0.3	10/0.5	150	F
BCF30	SOT-23	32	32	100	1.0	200	215/500	2/5	0.3	10/0.5	150	F
BC860A	SOT-23	45	50	100	1.0	200	125/250	2/5	0.3	10/0.5	150	F
BC860B	SOT-23	45	50	100	1.0	200	220/475	2/5	0.3	10/0.5	150	F
BC860C	SOT-23	45	50	100	1.0	200	420/800	2/5	0.3	10/0.5	150	F
BCF70	SOT-23	45	50	100	1.0	200	215/500	2/5	0.3	10/0.5	150	F
PMBT5086	SOT-23	50	50	50	1.2	100	150/-	10/5	0.3	10/1	100	F
PMBT5087	SOT-23	50	50	50	1.0	100	250/-	10/5	0.3	10/1	100	F

PINOUT DIAGRAM



PIN 1 PIN 2 PIN 3
PINOUT F: SOT-23 E B C

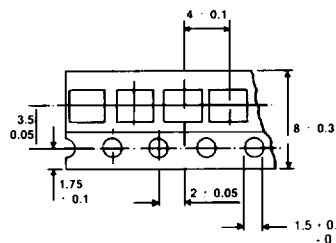
MARKING CODES

Type No.	Code	Type No.	Code	Type No.	Code	Type No.	Code
BC849B	2B	BC859C	4C	BCF32	D7	PMBT5088	1Q
BC849C	2C	BC860A	4E	BCF33	D8	PMBT5089	1R
BC850B	2F	BC860B	4F	BCF70	H7	PMBT6428	1K
BC850C	2G	BC860C	4G	BCF81	K9	PMBT6429	1L
BC859A	4A	BCF29	C7	PMBT5086	2P		
BC859B	4B	BCF30	C8	PMBT5087	2Q		

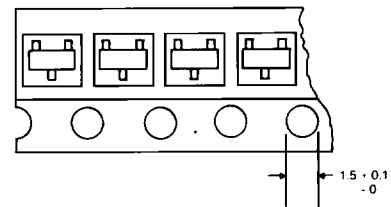
TAPE AND REEL SPECIFICATIONS

(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