

SMD SCHOTTKY DIODES

DESCRIPTION

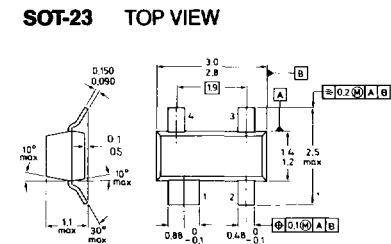
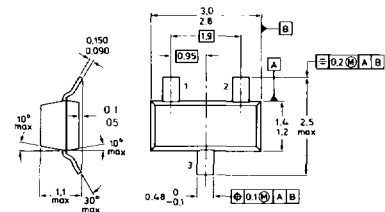
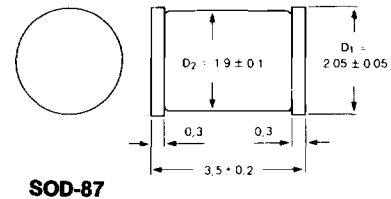
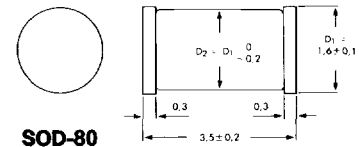
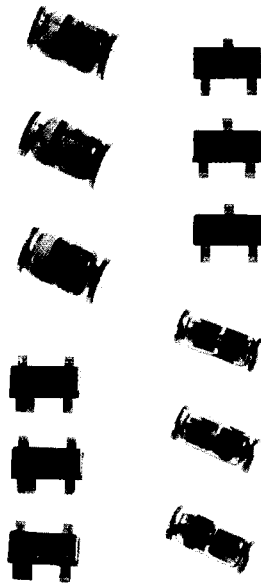
■ Philips Components Schottky barrier diodes are metal junction devices which combine the attributes of low forward voltage drop with fast switching times. Specific applications include battery back-up circuits, overshoot/undershoot protection, and voltage reference. They are offered in a choice of surface mount packages, providing the designer with alternatives for different power requirements, circuit board substrate materials, and assembly processing techniques.

FEATURES

- V_F as low as 400 mV at 10 mA
- Switching times under 1 ns
- Continuous current ratings up to 1A
- Dual diodes in SOT-23 and SOT-143
- SOD-80 for low-cost, hermetic glass packaging

MECHANICAL DATA

(Dimensions in mm)



SMD SCHOTTKY DIODES

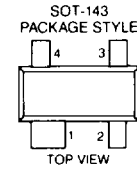
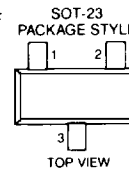
ELECTRICAL SPECIFICATIONS

TYPE	PACKAGE	RATINGS		C _d (max)		V _F		I _R		PINOUT
		V _R V	I _F mA	pF	@V _R V	mV	@I _F mA	MAX μA	@V _R V	
PMBD101	SOT-23	4	10	1	0	600	10	0.25	3	H
PMBD352*	SOT-23	4	10	1	0	600	10	0.25	3	K
PMBD353*	SOT-23	4	10	1	0	600	10	0.25	3	U
BAT17	SOT-23	4	30	1	0	600	10	0.25	3	H
PRL5817	SOD-87	20	1000	70	4	450	1000	1000	20	—
PRL5818	SOD-87	30	1000	50	4	550	1000	500	30	—
PRL5819	SOD-87	40	1000	50	4	600	1000	500	40	—
BAS85	SOD-80	30	200	10	1	400	10	2.0	25	—
BAT54	SOT-23	30	200	10	1	400	10	2.0	25	H
BAT74*	SOT-143	30	200	10	1	400	10	2.0	25	J
BAT54A*	SOT-23	30	200	10	1	400	10	2.0	25	L
BAT54C*	SOT-23	30	200	10	1	400	10	2.0	25	M
BAT54S*	SOT-23	30	200	10	1	400	10	2.0	25	K
BAS86	SOD-80	50	200	8	1	600	10	5.0	40	—

*Dual Diode

PINOUT DIAGRAMS

PINOUT H: SOT-23	PIN 1	PIN 2	PIN 3	PIN 4
PINOUT J: SOT-143	N.C.	A	K	—
PINOUT K: SOT-23	K ₁	K ₂	A ₂	A ₁
PINOUT L: SOT-23	K ₁	A ₂	K ₂ , A ₁	—
PINOUT M: SOT-23	K ₁	K ₂	A ₁ , A ₂	—
PINOUT U: SOT-23	A ₁	A ₂	K ₁ , K ₂	—
	A ₁	K ₂	K ₁ , A ₂	—



MARKING CODES

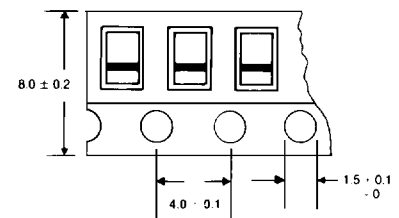
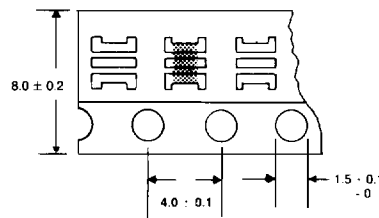
Type No.	Code	Type No.	Code	Type No.	Code	Type No.	Code
BAS85	*	BAT54A	*	PMBD101	4M	PRL5818	*
BAS86	*	BAT54C	*	PMBD352	5G	PRL5819	*
BAT17	A3	BAT54S	*	PMBD353	4F		
BAT54	L4	BAT74	JA	PRL5817	*		

*See individual device data sheet.

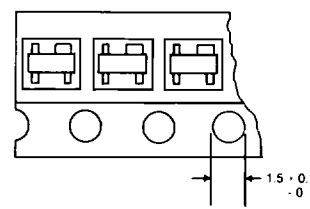
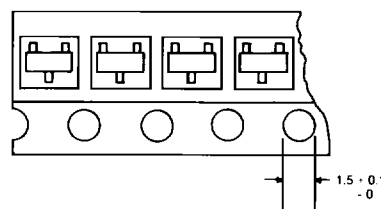
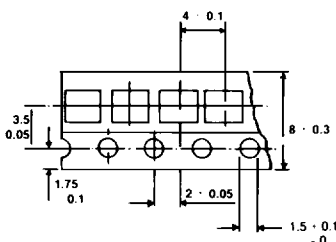
TAPE AND REEL SPECIFICATIONS

(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-143	3K	7	8	TRL
	10K	13	8	TRL 13
SOD-80	2.5K	7	8	TRL
	10K	13	8	TRL 13
SOD-87	2K	7	8	TRL



(STANDARD DIODE ORIENTATION IS
CATHODE BAND AT SPROCKET HOLE SIDE)



SOT-23 and SOT-143
TAPE DIMENSIONS

SOT-23
ORIENTATION

SOT-143
ORIENTATION