# Switching diode

## BAV70 / BAW56 / BAV99

\*This product is available only outside of Japan.

### Application

Ultra high speed switching

#### Features

- 1) Small surface mounting type. (SSD3)
- 2) High speed. (tr=1.5ns Typ.)
- 3) Four types of circuit configurations are available.

### ●Construction

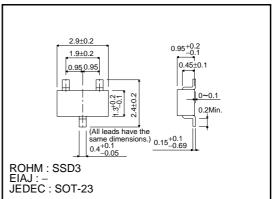
Silicon epitaxial planar

### ● Marking (Type No.)

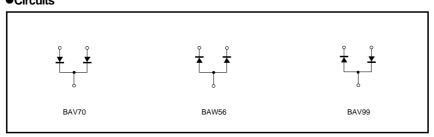
Product name	Type No.					
BAV70	RA4					
BAW56	RA1					
BAV99	RA7					
(Ex.) DA)/70						

(Ex.) BAV70

## • External dimensions (Units : mm)



### ● Circuits



### Absolute maximum ratings (Ta=25°C)

Туре	Peak reverse voltage V <sub>RM</sub> (V)	DC reverse voltage V <sub>R</sub> (V)	Peak forward current IFM (mA)	Mean rectifying current lo (mA)	Surge current (1µs) Isurge (A)	Power dissipation (TOTAL) Pd (mW)	Junction temperature Tj (°C)	Storage temperature Tstg (°C)	P / N Type
BAV70	75	70	450	-	4	300	150	<b>−55~+150</b>	N
BAW56	85	70	450	_	4	225	150	<b>−55~+150</b>	Р
BAV99	85	75	450	_	4	300	150	-55~+150	N

### ● Electrical characteristics (Ta=25°C)

	Forward voltage		Reverse current		Capacitance between terminals			Reverse recovery time		
Туре	V <sub>F</sub> (V)	Cond.	I <sub>R</sub> (μA) Cond.		Ст (pF)	Cond.		trr (ns)	Cond.	
	Max.	IF (mA)	Max.	V <sub>R</sub> (V)	Max.	V <sub>R</sub> (V)	f (MHz)	Max.	V <sub>R</sub> (V)	IF (mA)
BAV70	1.25	150	2.5	70	1.5	0	1	4	10	10
BAW56	1.25	150	1.0	75	2.0	0	1	4	10	10
BAV99	1.25	150	1.0	75	1.5	0	1	4	10	10

### ●Electrical characteristic curves (Ta=25°C)

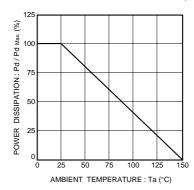


Fig.1 Power attenuation curve

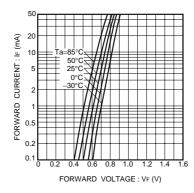


Fig.2 Forward characteristics (P Type)

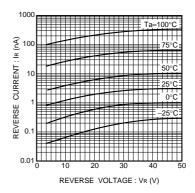


Fig.3 Reverse characteristics (P Type)

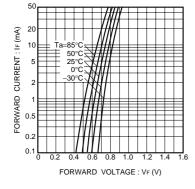


Fig.4 Forward characteristics (N Type)

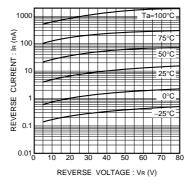


Fig.5 Reverse characteristics (N Type)

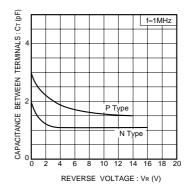


Fig.6 Capacitance between terminals characteristics

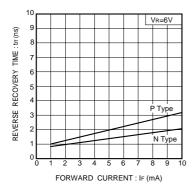


Fig.7 Reverse recovery time

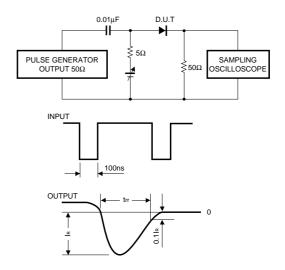


Fig.8 Reverse recovery time (trr) measurement circuit