Switching diode BAV70 / BAW56 / BAV99

*This product is available only outside of Japan.

Application

Ultra high speed switching

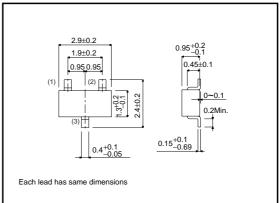
Features

- 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

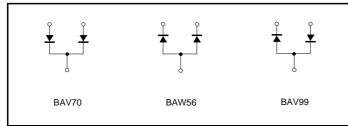
•External dimensions (Unit : mm)



•Marking (Type No.)

Product name	Type No.			
BAV70	RA4			
BAW56	RA1			
BAV99	RA7			
(Ex.) BAV70 <i>サ</i> ∀と				

Equivalent circuits





Diodes

Absolute maximum ratings (1a=25°C)									
Туре	Peak reverse voltage VRM (V)	DC reverse voltage V _R (V)	Peak forward current Iғм (mA)	Mean rectifying current I⊧ (mA)	Surge current (1µs) I _{surge} (A)	Power dissipation (TOTAL) Pd (mW)	Junction temperature Tj (°C)	Storage temperature Tstg (°C)	P / N Type
BAV70	75	70	450	215	4	300	150	-55 to +150	Ν
BAW56	85	70	450	215	4	225	150	-55 to +150	Р
BAV99	85	75	450	215	4	300	150	-55 to +150	N

•Absolute maximum ratings (Ta=25°C)

•Electrical characteristics (Ta=25°C)

	Forward voltage		Reverse current		Capacitance between terminals			Reverse recovery time		
Туре	V⊧ (V) Max.	Cond.	IR (μΑ)	Cond. CT (pF)	Cond.		trr (ns)	Cond.		
		I⊧ (mA)	A) Max.	Vr (V)	Max.	Vr (V)	f (MHz)	Max.	Vr (V)	I⊧ (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

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●Electrical characteristic curves (Ta=25°C)

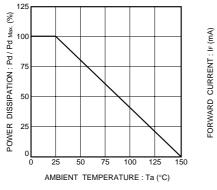


Fig.1 Power attenuation curve

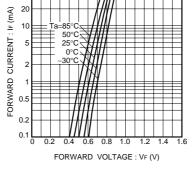


Fig.2 Forward characteristics (P Type)

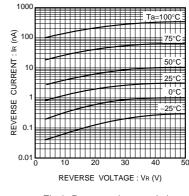
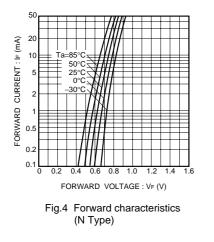
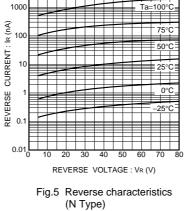


Fig.3 Reverse characteristics (P Type)





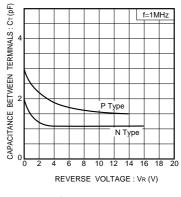


Fig.6 Capacitance between terminals characteristics

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Diodes

BAV70 / BAW56 / BAV99

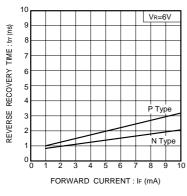


Fig.7 Reverse recovery time

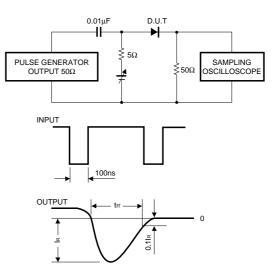


Fig.8 Reverse recovery time (t_r) measurement circuit

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