Switching diode

BAV70 / BAW56 / BAV99

∗This product is available only outside of Japan.

●Application

Ultra high speed switching

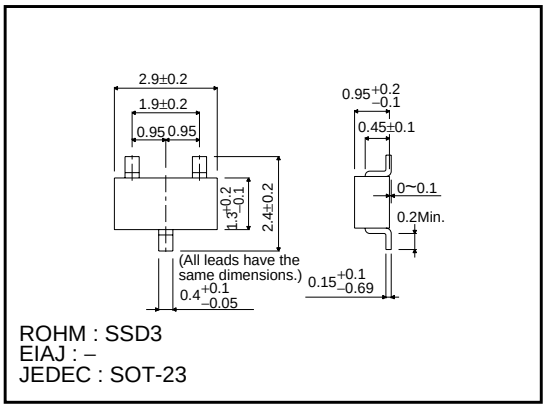
●Features

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

●Construction

Silicon epitaxial planar

●External dimensions (Units : mm)



ROHM : SSD3
EIAJ : –
JEDEC : SOT-23

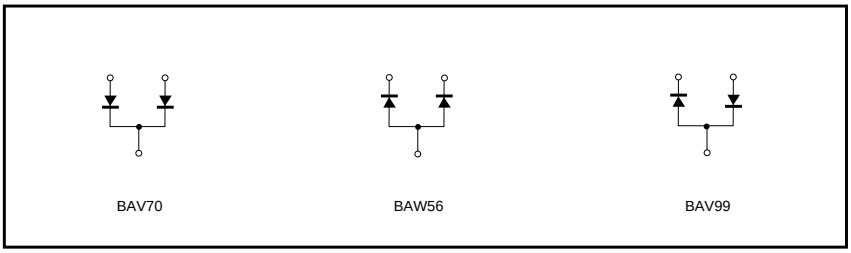
●Marking (Type No.)

Product name	Type No.
BAV70	RA4
BAW56	RA1
BAV99	RA7

(Ex.) BAV70



●Circuits



●Absolute maximum ratings (Ta=25°C)

Type	Peak reverse voltage V_{RM} (V)	DC reverse voltage V_R (V)	Peak forward current I_{FM} (mA)	Mean rectifying current I_O (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	–	4	300	150	–55~+150	N
BAW56	85	70	450	–	4	225	150	–55~+150	P
BAV99	85	75	450	–	4	300	150	–55~+150	N

●Electrical characteristics (Ta=25°C)

Type	Forward voltage		Reverse current		Capacitance between terminals			Reverse recovery time		
	V_F (V) Max.	Cond. I_F (mA)	I_R (μA) Max.	Cond. V_R (V)	C_T (pF) Max.	Cond. V_R (V)	Cond. f (MHz)	t_{rr} (ns) Max.	Cond. V_R (V)	Cond. I_F (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)

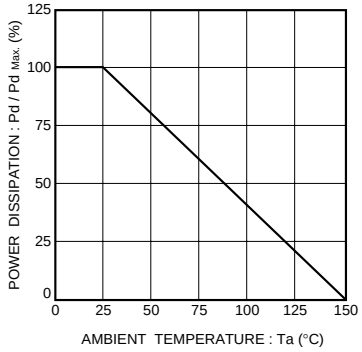


Fig.1 Power attenuation curve

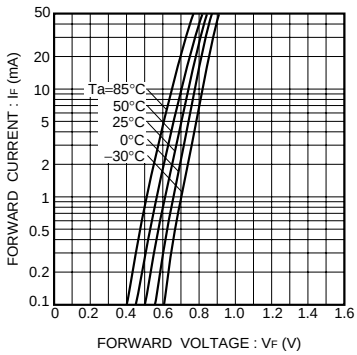


Fig.2 Forward characteristics (P Type)

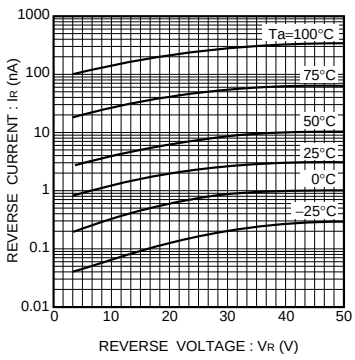


Fig.3 Reverse characteristics (P Type)

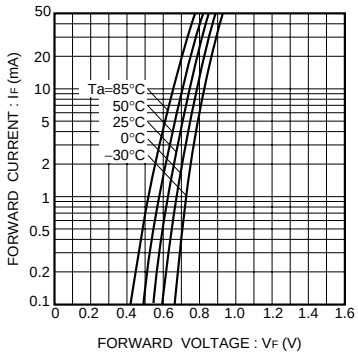


Fig.4 Forward characteristics (N Type)

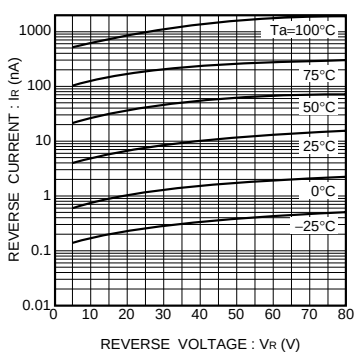


Fig.5 Reverse characteristics (N Type)

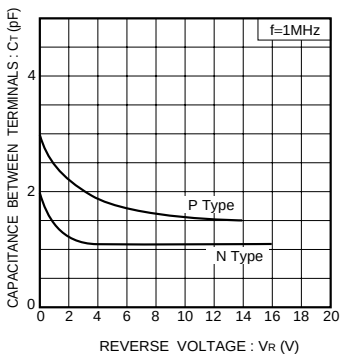


Fig.6 Capacitance between terminals characteristics

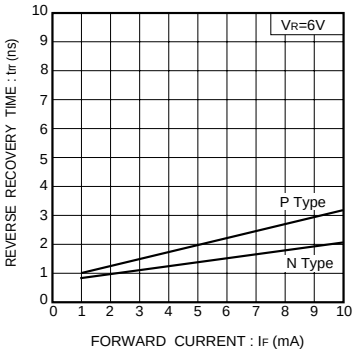


Fig.7 Reverse recovery time

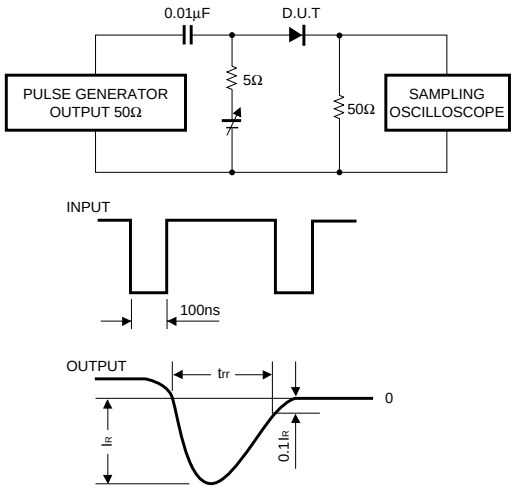


Fig.8 Reverse recovery time (t_{rr}) measurement circuit