Series connected diode array

DA221 / DA204U / DA204K / DAN217

New *New*

DAN217U / BAV99U *1

*1 BAV99U is only sold in countries other than Japan.

●Applications

Bias circuits
Protection circuits

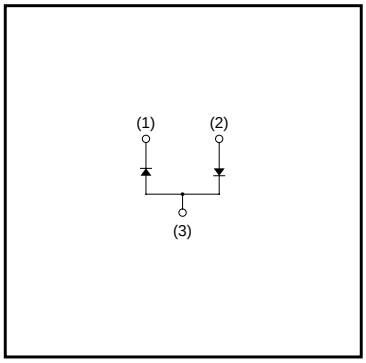
●Features

1) Two diode elements are connected in series (vfx2) per circuit.
2) Three types of packages are available. (EMD3,UMD3,SMD3)

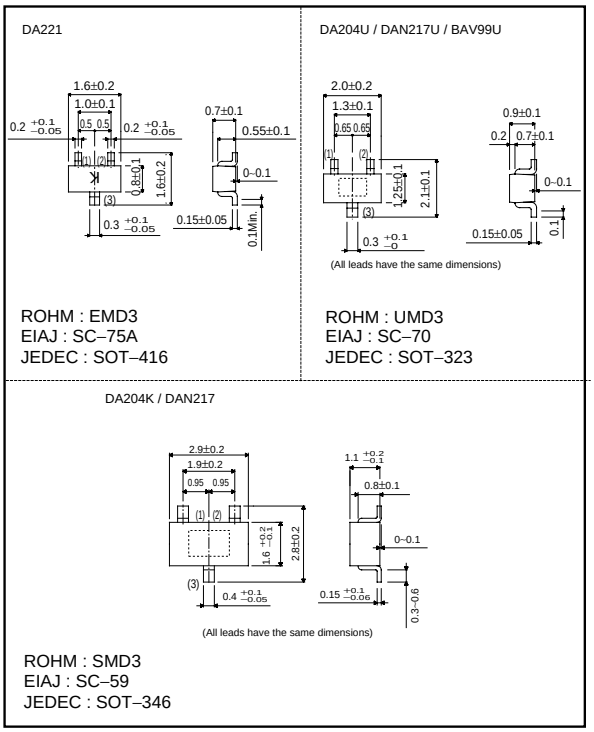
●Construction

Silicon epitaxial planar

●Equivalent circuit



●External dimensions (Units : mm)



ROHM : EMD3
EIAJ : SC–75A
JEDEC : SOT–416

ROHM : UMD3
EIAJ : SC–70
JEDEC : SOT–323

ROHM : SMD3
EIAJ : SC–59
JEDEC : SOT–346

●Marking

SMD3		UMD3		EMD3	
DA204K	K	DA204U	K	DA221	K
DAN217	BA	DAN217U BAV99U	A7	–	–

● **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}(mA)	Power dissipation (TOTAL) Pd(mW)	Junction temperature Tj(°C)	Storage temperature Tstg(°C)
DA221	20	20	200	100	300	150	150	–55 ~ +150
DA204U	20	20	200	100	300	200	150	–55 ~ +150
DAN217U	80	80	300	100	4000	200	150	–55 ~ +150
BAV99U	80	80	300	100	4000	200	150	–55 ~ +150
DA204K	20	20	200	100	300	200	150	–55 ~ +150
DAN217	80	80	300	100	4000	200	150	–55 ~ +150

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

Type	Forward voltage		Reverse current		Fig
	V_F(V) Max.	Cond. I_F(mA)	I_R(μA) Max.	Cond. V_R(V)	
DA221	1.0	10	0.1	15	1 ~ 3
DA204U	1.0	10	0.1	15	1 ~ 3
DAN217U	1.2	100	0.2	70	6 ~ 7
BAV99U	1.2	100	0.2	70	6 ~ 7
DA204K	1.0	10	0.1	15	1 ~ 3
DAN217	1.2	100	0.1	70	4 ~ 5

● **Electrical characteristic curves** (Ta = 25°C unless specified otherwise)

(DA221,DA204U,DA204K) ...Fig.1~3

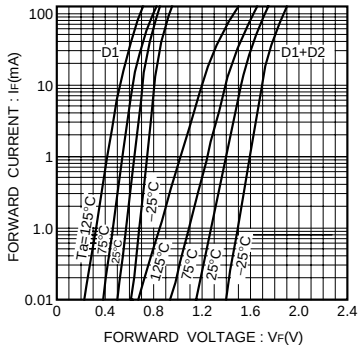


Fig.1 Forward current vs. forward voltage

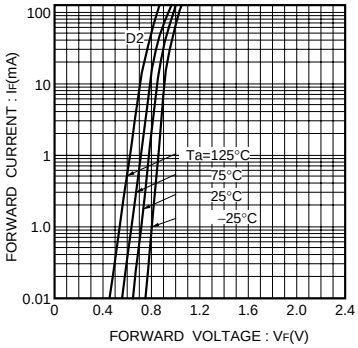


Fig.2 Forward current vs. forward voltage

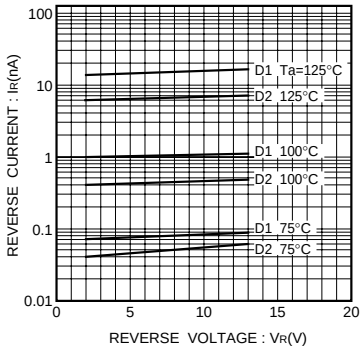


Fig.3 Reverse current vs. reverse voltage

(DAN217) ...Fig.4~5

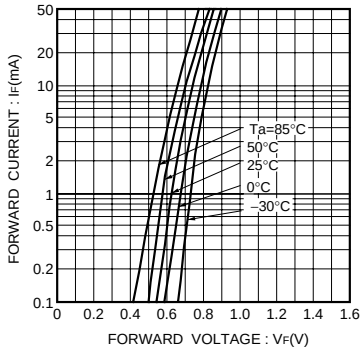


Fig.4 Forward current vs. forward voltage

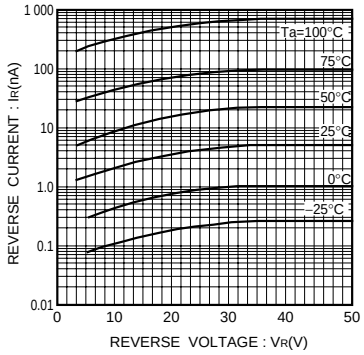


Fig.5 Reverse current vs. reverse voltage

(DAN217U,BAV99U) ...Fig.6~7

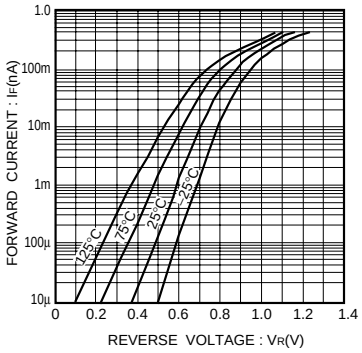


Fig.6 Forward current vs. forword voltage

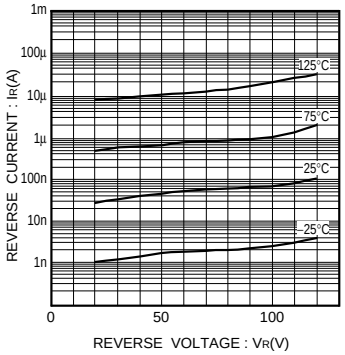


Fig.7 Reverse current vs. reverse voltage