

DA112	DA115	DA119	DAN202C	DAP202K	DAN2
DA113	DA116	DA120	DAP202C	DAN202U	DAN2
DA114	DA118	DA121	DAN202K	DAP202U	DAN2
					DAP22

Diode, array, high-speed switching, surface mount

Dimensions (Units : mm)

In these single packages, there are one or two diodes as shown in the circuit diagrams.

Features

available in the following 3-pin packages:

- SSD3 (SST, US/European SOT-23) (similar to SC-59)
- SMD3 (SMO, SC-59, Japanese SOT-23)
- UMD3 (UMD, SC-90, SOT-323)
- EMD3 (EMO, 50-90)
- products are marked as follows:

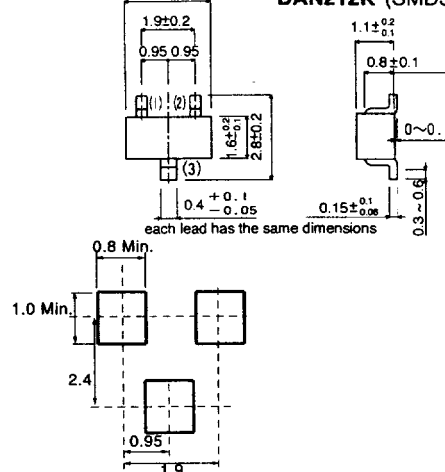
DA112=AZ	DAN202C=N
DA113=AY	DAP202C=P
DA114=AV	DAN202K=N
DA115 = AU	DAP202K =P
DA116=AZ	DAN202U=N
DA118=AY	DAP202U=P
DA119=AU	DAN212C=N
DA120 = AZ	DAN212K =AV
DA121=AV	DAN222=N
	DAP222 = P

- suitable for automatic mounting on printed circuit board
- high switching speed ($t_{rr} = 1.5$ ns typically)
- all diodes in the chip have similar characteristics

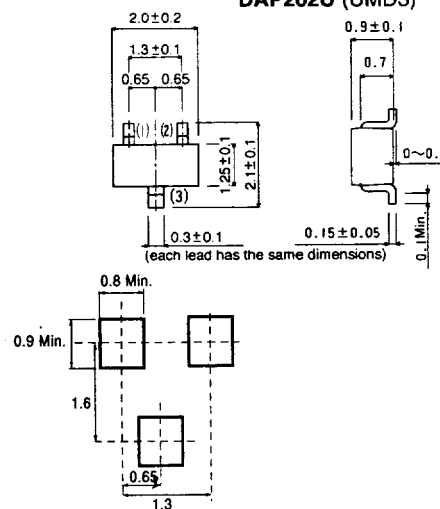
Applications

- ultra high speed switching

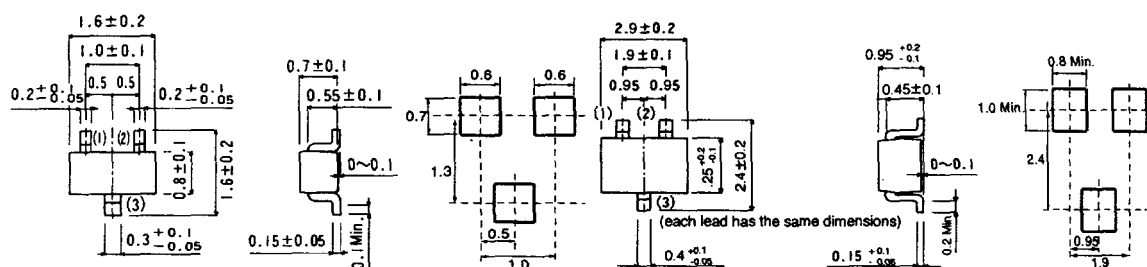
DA116, DA118, DA119, DAN202K, DAP202K, DAN212K (SMD3)



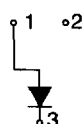
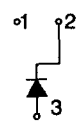
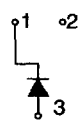
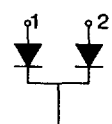
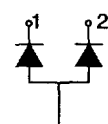
DA112, DA113, DA114, DA115, DAN202U, DAP202U (UMD3)



DAI12 - DAI16, DAI18 - DAI 21, DAN(P)202C(K)(U), DAN212C(K), DAN(P)222 Diode arrays

DA120, 0A121,
DAN222, DAP222 (EMD3)DAN202C, DAP202C,
DAN212C (SSD3)

Equivalent circuits

DA115
DA119DA112
DA116
DA120DA113
DA118DAN202C
DAN202K
DAN202U
DAN222DAP202C
DAP202K
DAP202U
DAP222DA114
DA121
DAN212C
DAP212KAbsolute maximum ratings ($T_a = 25^{\circ}\text{C}$) (Sheet 1 of 2)

Part no.	Peak reverse voltage V_{RM} (V)	DC reverse voltage V_R (V)	Peak forward current I_F (mA)	Mean rectifying current I_O (mA)	Surge current (1 μ s) I_{surge} (A)	Power dissipation (Total) P_d (mW)	Junction temp. T_J ($^{\circ}\text{C}$)	Storage temp. T_{stg} ($^{\circ}\text{C}$)	Type
DA112	80	80	300	100	4	200	150	-55 ~ +150	P
DA113	80	80	300	100	0.5	200	150	-55 ~ +150	P
DA114	80	80	300	100	4	200	150	-55 ~ +150	N
DA115	80	80	300	100	4	200	150	-55 ~ +150	N
DA116	80	80	300	100	4	200	150	-55 ~ +150	P
DA118	80	80	300	100	4	200	150	-55 ~ +150	P
DA119	80	80	300	100	4	200	150	-55 ~ +150	N
DA120	80	80	300	100	4	150	150	-55 ~ +150	P
DA121	80	80	300	100	4	150	150	-55 ~ +150	N
DAN202C	80	80	300	100	4	150	150	-55 ~ +150	N
DAN202K	80	80	300	100	4	150	150	-55 ~ +150	N
DAP202C	80	80	300	100	4	150	150	-55 ~ +150	P
DAP202K	80	80	300	100	4	150	150	-55 ~ +150	P

Diode arrays DA112 - DA116, DA118 - DA121, DAN(P)202C(K)(U), DAN212C(K), DAN(P)222

Absolute maximum ratings (Ta = 25°C) (Sheet 2 of 2)

Part no.	Peak reverse voltage V _{RM} (V)	DC reverse voltage V _R (V)	Peak forward current I _F (mA)	Mean rectifying current I _O (mA)	Surge current (1μs) I _{surge} (A)	Power dissipation (Total) P _d (mW)	Junction temp. T _j (°C)	Storage temp. T _{stg} (°C)	Type
DAN202U	80	80	300	100	4	150	150	-55 ~ +150	N
DAP202U	80	80	300	100	4	150	150	-55 ~ +150	P
DAN212C	80	80	300	100	4	150	150	-55 ~ +150	N
DAN212K	80	80	300	100	4	150	150	-55 ~ +150	N
DAN222	80	80	300	100	4	150	150	-55 ~ +150	N
DAP222	80	80	300	100	4	150	150	-55 ~ +150	P

Electrical characteristics (unless otherwise noted, Ta = 25°C)

Part no.	Forward voltage		Reverse current		Capacitance between terminals			Reverse recovery time			
	V _F (V) Max	I _F (mA)	I _R (μA) Max	V _R (V)	C _T (pF) max.	V _R (V)	f (MHz)	t _{rr} (nS) Max	V _R (V)	I _F (mA)	Ref
DA112	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DA113	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DA114	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DA115	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DA116	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DA118	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DA119	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DA120	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DA121	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DAN202C	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DAN202K	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DAP202C	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DAP202K	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DAN202U	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DAP202U	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DAN212C	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DAN212K	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DAN222	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
DAP222	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8

DAI12- DAI 16, DAI18 - DAI 21, DAN(P)202C(K)(U), DAN212C(K), DAN(P)222 Diode arrays

Electrical characteristic curves

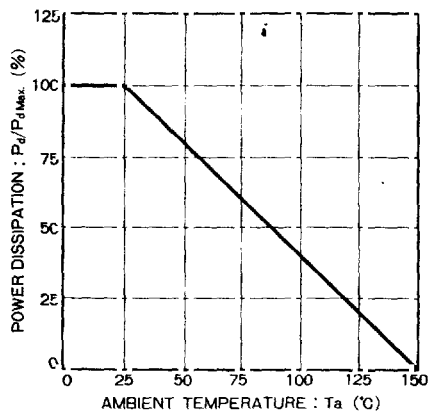


Figure 1

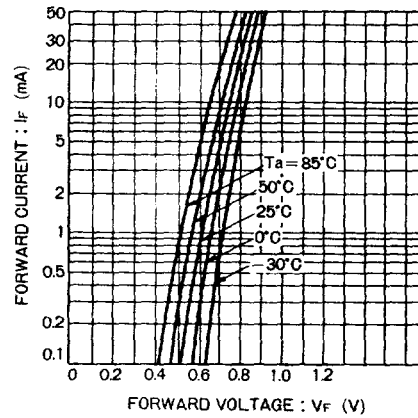


Figure 2

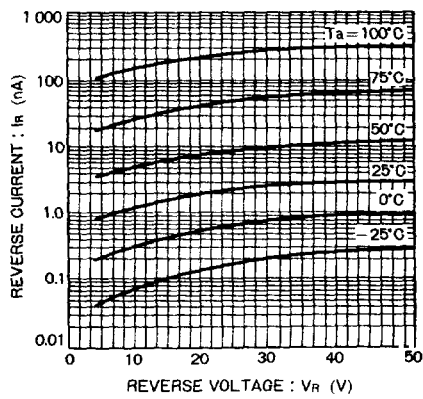


Figure 3

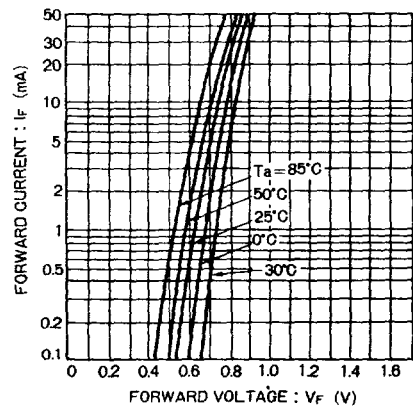


Figure 4

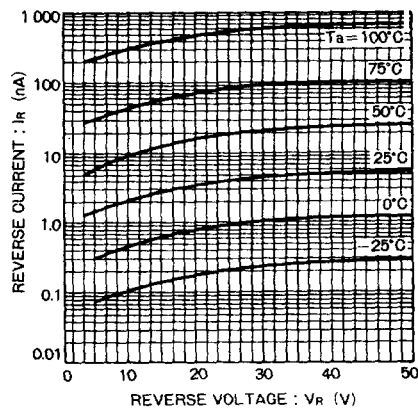


Figure 5

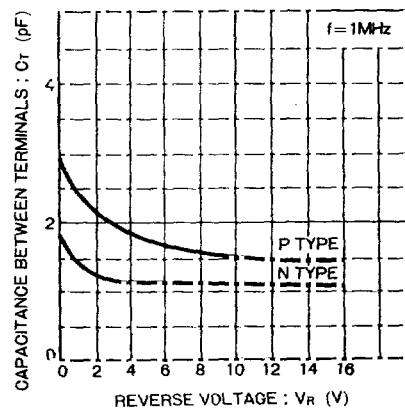


Figure 6

Diode arrays DA112, DA116, DA118, DA121, DAN(P)202C(K)(U), DAN212C(K), DAN(P)222

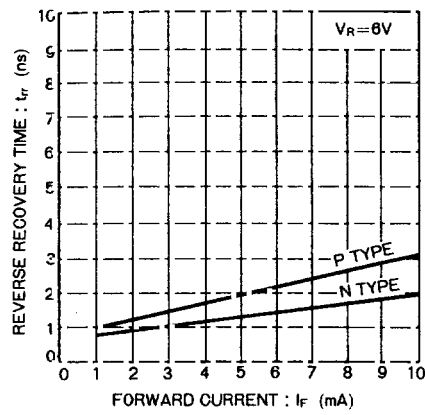


Figure 7

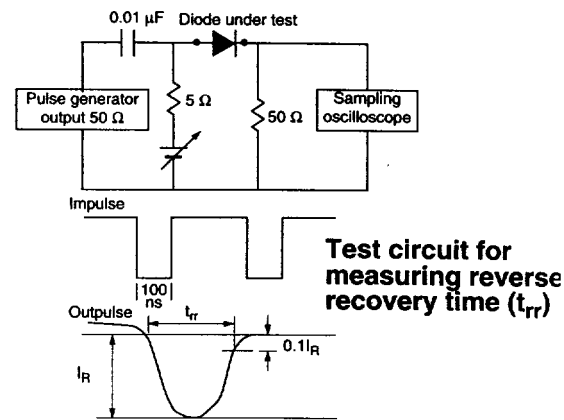


Figure 8