

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:

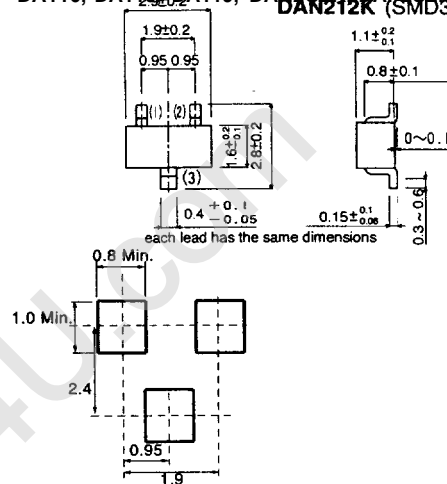
DA112=AZ	DAN202C=N
DA113=AY	DAP202C=P
DA114=AV	DAN202K=N
DA115 = AU	DAP202K =P
DA116=AZ	DAN202U=N
DA118=AY	DAP202U=P
DA119=AU	DAN212C=N
DA120 = AZ	DAN212K =AV
DA121=AV	DAN222=N
	DAP222 = P

- 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

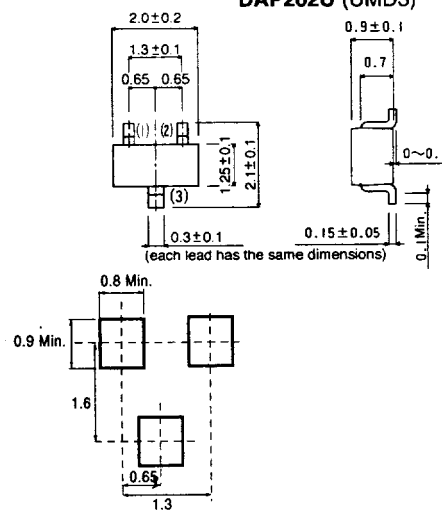
**Applications**

- ultra high speed switching

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



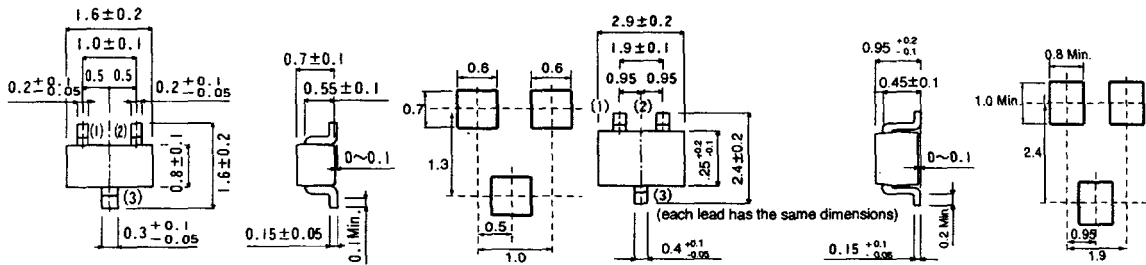
DA112, DA113, DA114, DA115, DAN202U, DAP202U (UMD3)



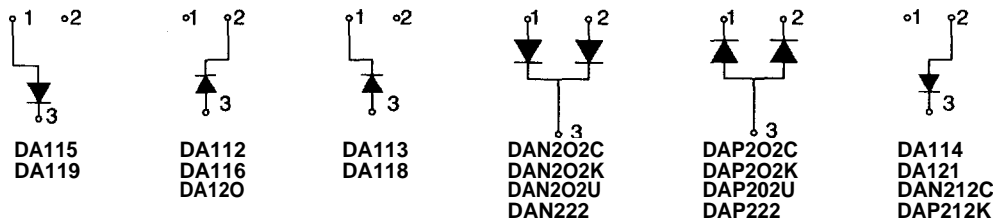
DAI12 - DAI16, DAI18 - DAI21, DAN(P)202C(K)(U), DAN212C(K), DAN(P)222 Diode arrays

DA120, 0A121,  
DAN222, DAP222 (EMD3)

DAN202C, DAP202C,  
DAN212C (SSD3)



Equivalent circuits



Absolute maximum ratings (Ta = 25°C) (Sheet 1 of 2)

Part no.	Peak reverse voltage V <sub>RM</sub> (V)	DC reverse voltage V <sub>R</sub> (V)	Peak forward current I <sub>F</sub> (mA)	Mean rectifying current I <sub>O</sub> (mA)	Surge current (1μs) I <sub>surge</sub> (A)	Power dissipation (Total) P <sub>d</sub> (mW)	Junction temp. T <sub>J</sub> (°C)	Storage temp. T <sub>stg</sub> (°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 <sub>RM</sub> (V)	DC reverse voltage V <sub>R</sub> (V)	Peak forward current I <sub>F</sub> (mA)	Mean rectifying current I <sub>O</sub> (mA)	Surge current (1μs) I <sub>surge</sub> (A)	Power dissipation (Total) P <sub>d</sub> (mW)	Junction temp. T <sub>j</sub> (°C)	Storage temp. T <sub>stg</sub> (°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 <sub>F</sub> (V) Max	I <sub>F</sub> (mA)	I <sub>R</sub> (μA) Max	V <sub>R</sub> (V)	C <sub>T</sub> (pF) max.	V <sub>R</sub> (V)	f (MHz)	t <sub>rr</sub> (ns) Max	V <sub>R</sub> (V)	I <sub>F</sub> (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- DAI16, DAI18 - DAI21, DAN(P)202C(K)(U), DAN212C(K), DAN(P)222 Diode arrays

Electrical characteristic curves

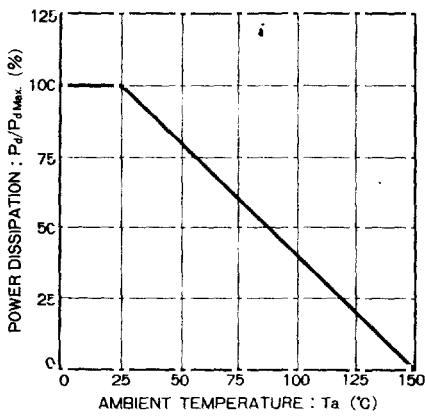


Figure 1

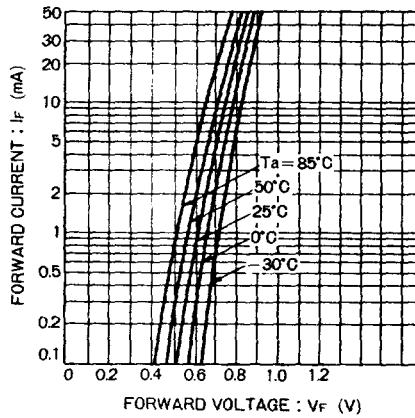


Figure 2

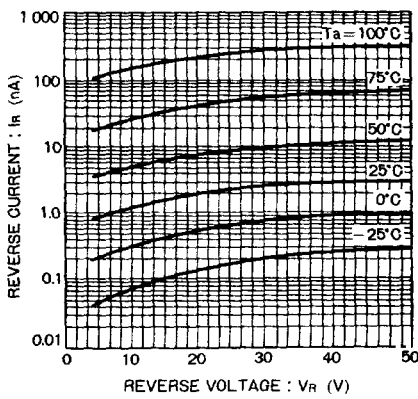


Figure 3

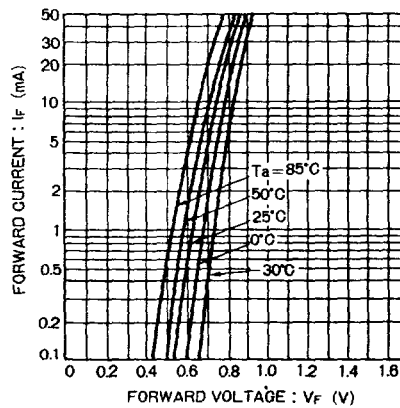


Figure 4

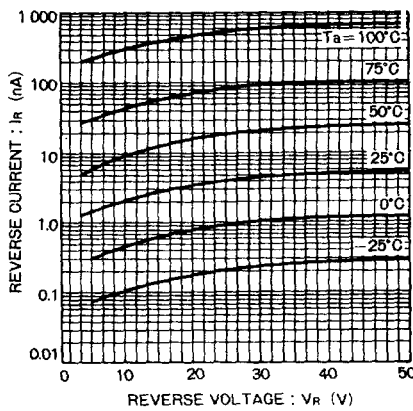


Figure 5

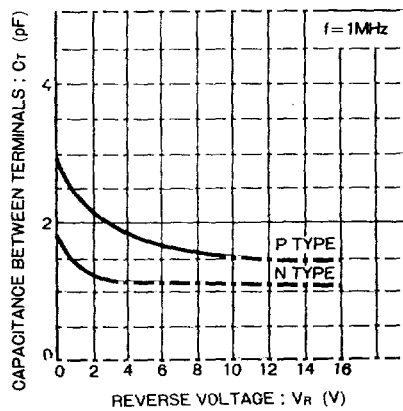


Figure 6

Diode arrays DAI12, DAI16, DAI18, DAI21, DAN(P)202C(K)(U), DAN212C(K), DAN(P)222

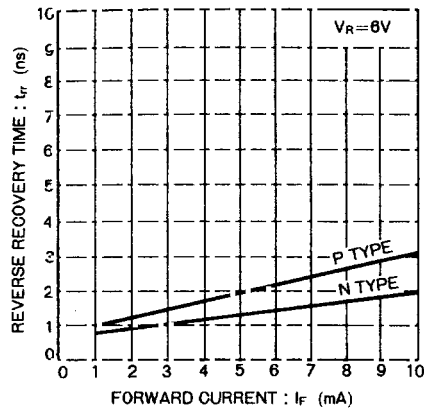


Figure 7

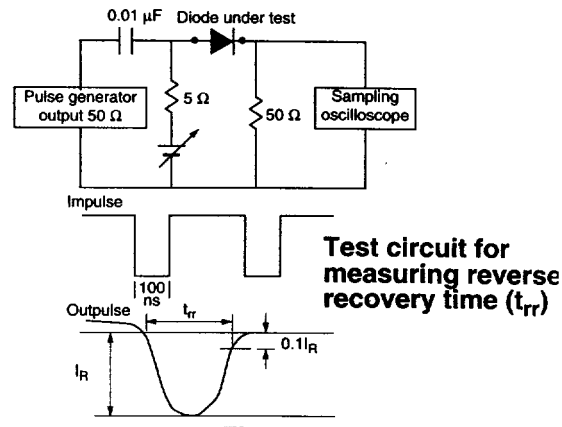


Figure 8