Switching diode

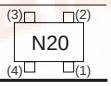
DAN222M / DAN222 / DAN202U / DAN202K
DAP222M / DAP222 / DAP202U / DAP202K
DA227

●Application
Ultra high speed switching

●Features
1) Four types of packaging are available.
2) High speed. (t_{rr}=1.5ns Typ.)
3) Suitable for high packing density layout.
4) High reliability.

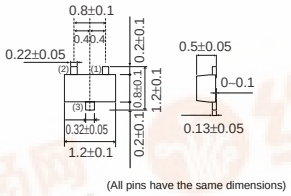
●Construction
Silicon epitaxial planar

●Marking

DAN222M DAN222 DAN202U DAN202K	
DAP222M DAP222 DAP202U DAP202K	
DA227	

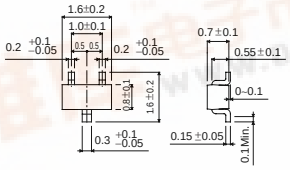
●External dimensions (Unit : mm)

DAN222M / DAP222M



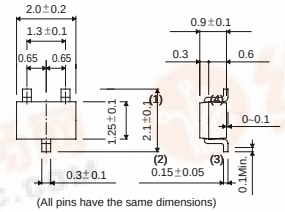
ROHM : VMD3
EIAJ :
JEDEC :

DAN222 / DAP222



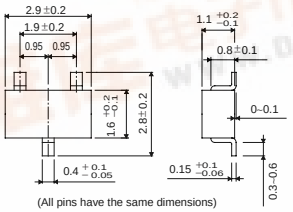
ROHM : EMD3
EIAJ : SC - 75
JEDEC : SOT - 416

DAN202U / DAP202U



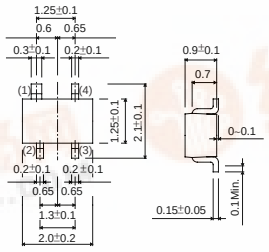
ROHM : UMD3
EIAJ : SC - 70
JEDEC : SOT - 323

DAN202K / DAP202K



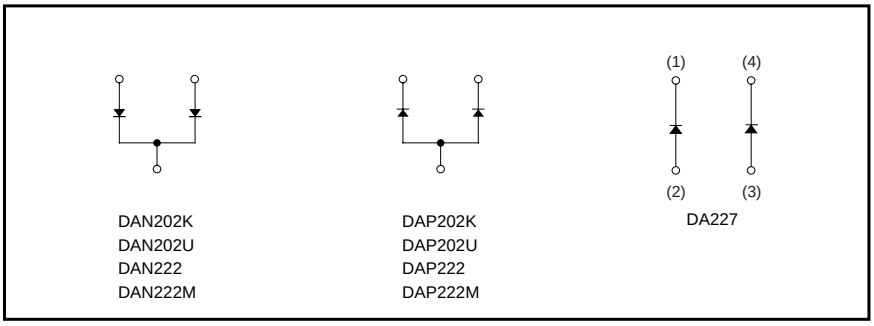
ROHM : SMD3
EIAJ : SC - 59
JEDEC : SOT - 346

DA227



ROHM : UMD4
EIAJ : SC - 82
JEDEC : SOT - 343

●Circuits



DAN202K
DAN202U
DAN222
DAN222M

DAP202K
DAP202U
DAP222
DAP222M

DA227

●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
DAN202K	80	80	300	100	4	200	150	–55 to +150	N
DAP202K	80	80	300	100	4	200	150	–55 to +150	P
DAN202U	80	80	300	100	4	200	150	–55 to +150	N
DAP202U	80	80	300	100	4	200	150	–55 to +150	P
DAN222	80	80	300	100	4	150	150	–55 to +150	N
DAP222	80	80	300	100	4	150	150	–55 to +150	P
DAN222M	80	80	300	100	4	150	100	–55 to +150	N
DAP222M	80	80	300	100	4	150	100	–55 to +150	P
DA227	80	80	300	100	4	150	150	–55 to +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)
DAN202K	1.2	100	0.1	70	3.5	6	1	4	6	5
DAP202K	1.2	100	0.1	70	3.5	6	1	4	6	5
DAN202U	1.2	100	0.1	70	3.5	6	1	4	6	5
DAP202U	1.2	100	0.1	70	3.5	6	1	4	6	5
DAN222	1.2	100	0.1	70	3.5	6	1	4	6	5
DAP222	1.2	100	0.1	70	3.5	6	1	4	6	5
DAN222M	1.2	100	0.1	70	3.5	6	1	4	6	5
DAP222M	1.2	100	0.1	70	3.5	6	1	4	6	5
DA227	1.2	100	0.1	70	3.5	6	1	4	6	5

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

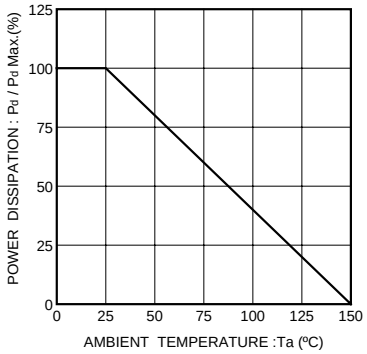


Fig.1 Power attenuation curve

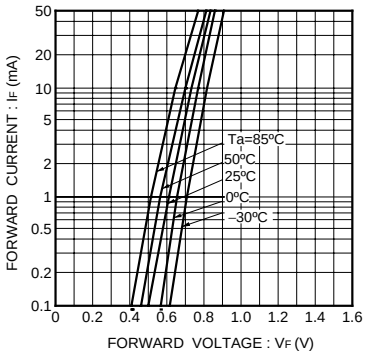


Fig.2 Forward characteristics (P Type)

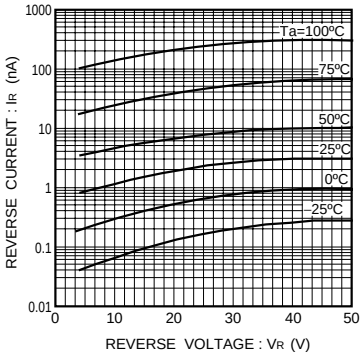


Fig.3 Reverse characteristics (P Type)

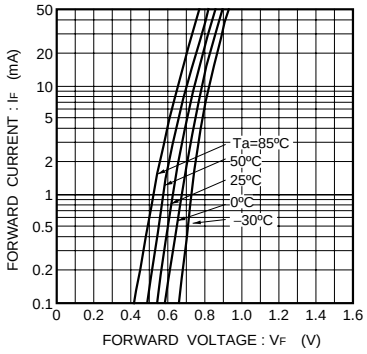


Fig.4 Forward characteristics (N Type)

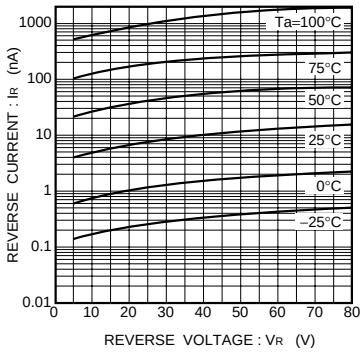


Fig.5 Reverse characteristics (N Type)

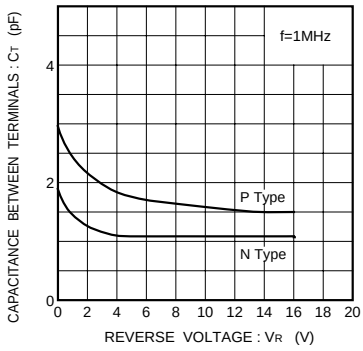


Fig.6 Capacitance between terminals characteristics

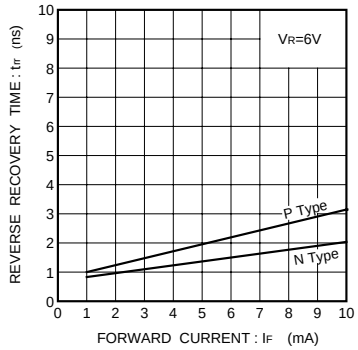


Fig.7 Reverse recovery time

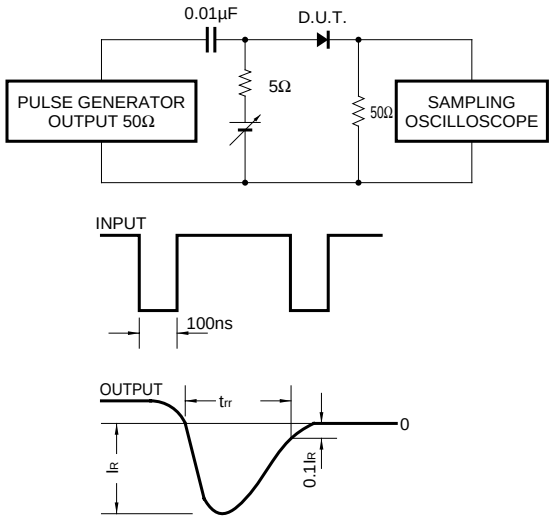


Fig.8 Reverse recovery time (t_{rr}) measurement circuit

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