

Switching diode

DA221 / DA204U / DA204K

New

DA228U / DA228K / UMR12N

●Applications

Bias circuits

Protection circuits

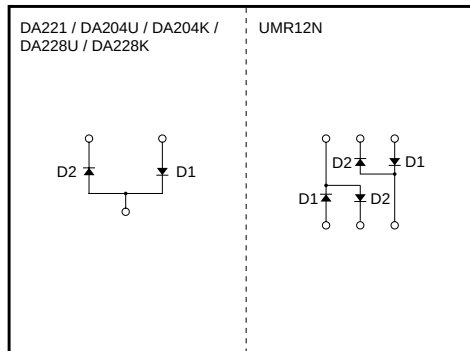
●Features

- 1) Three types of packages are available.
(EMD3, UMD3, SMD3)
- 2) Two diode elements are connected in series
($V_F \times 2$) per circuit.

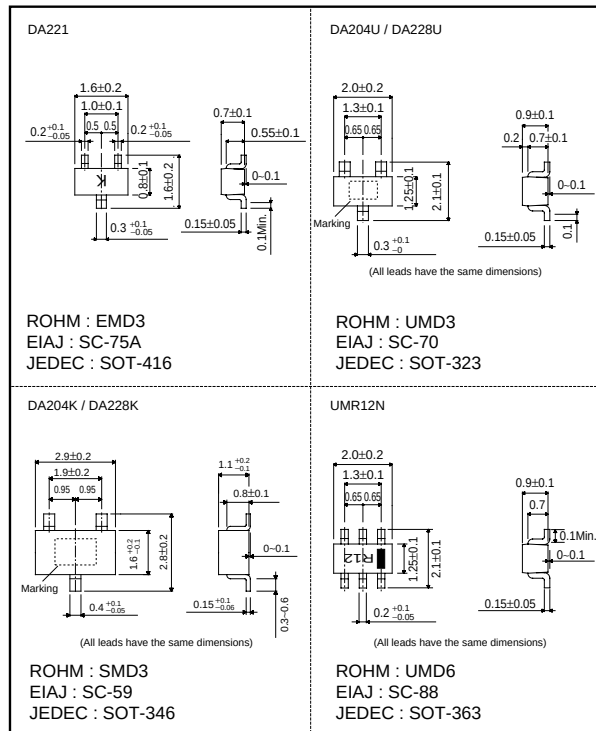
●Construction

Silicon epitaxial planar

●Circuit



●External dimensions (Units : mm)



●Marking

EMD3		UMD3		UMD6		SMD3	
DA221		DA204U		UMR12N		DA204K	
—	—	DA228U		—	—	DA228K	

DA221 / DA204U / DA204K / DA228U / DA228K / UMR12N

Diodes

●Absolute maximum ratings (Ta = 25°C)

Type	Peak reverse voltage VRM(V)	DC reverse voltage VR(V)	Peak forward current IFM(mA)	Mean rectifying current Io(mA)	Surge current (1μs) Isurge(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
DA228U	80	80	200	100	300	200	150	-55~+150
DA204K	20	20	200	100	300	200	150	-55~+150
DA228K	80	80	200	100	300	200	150	-55~+150
UMR12N	80	80	200	100	300	200	150	-55~+150

●Electrical characteristics (Ta = 25°C)

Type	Forward voltage		Reverse current		Fig.
	VF(V) Max.	Cond. IF(mA)	IR(μA) Max.	Cond. VR(V)	
DA221	1.0	10	0.1	15	1~4
DA204U	1.0	10	0.1	15	1~4
DA228U	1.2	100	0.1	80	5~9
DA204K	1.0	10	0.1	15	1~4
DA228K	1.2	100	0.1	80	5~9
UMR12N	1.2	100	0.1	80	5~9

●Electrical characteristic curves (Ta = 25°C)

(DA221, DA204U, DA204K) ...Fig.1~4

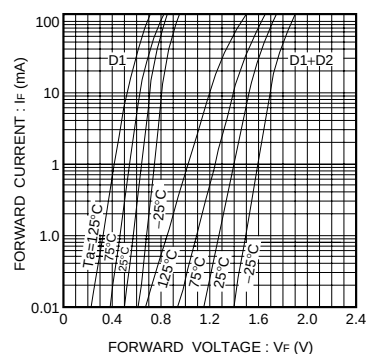


Fig.1 Forward characteristics

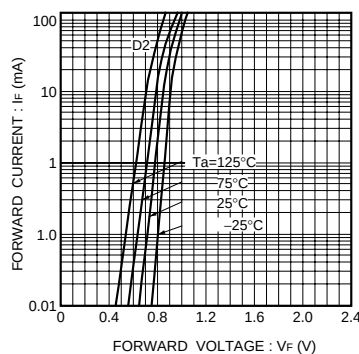


Fig.2 Forward characteristics

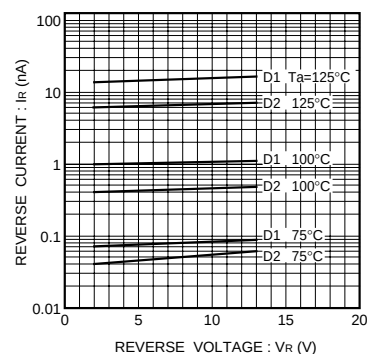


Fig.3 Reverse characteristics

DA221 / DA204U / DA204K / DA228U / DA228K / UMR12N

Diodes

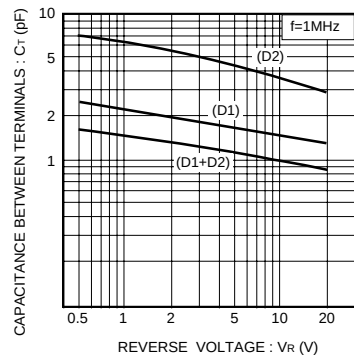


Fig.4 Capacitance between terminals characteristics

(DA228U, DA228K, UMR12N) ...Fig.5~9

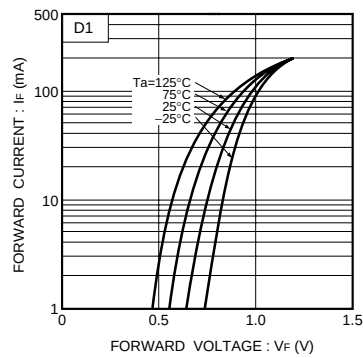


Fig.5 Forward characteristics

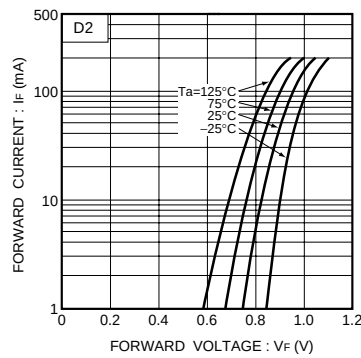


Fig.6 Forward characteristics

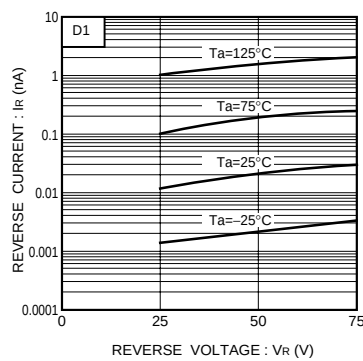


Fig.7 Reverse characteristics

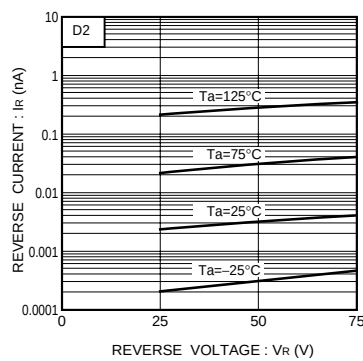


Fig.8 Reverse characteristics

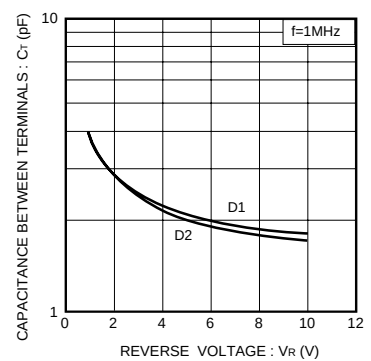


Fig.9 Capacitance between terminals characteristics