Switching diode

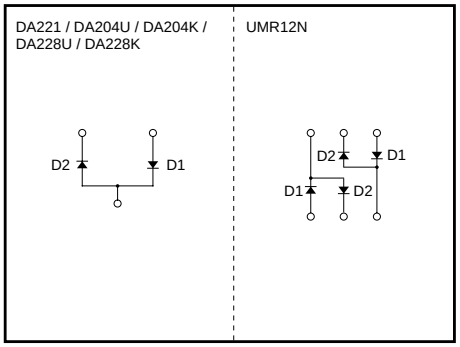
DA221 / DA204U / DA204
DA228U / DA228K / UMR12N

●Applications
Bias circuits
Protection circuits

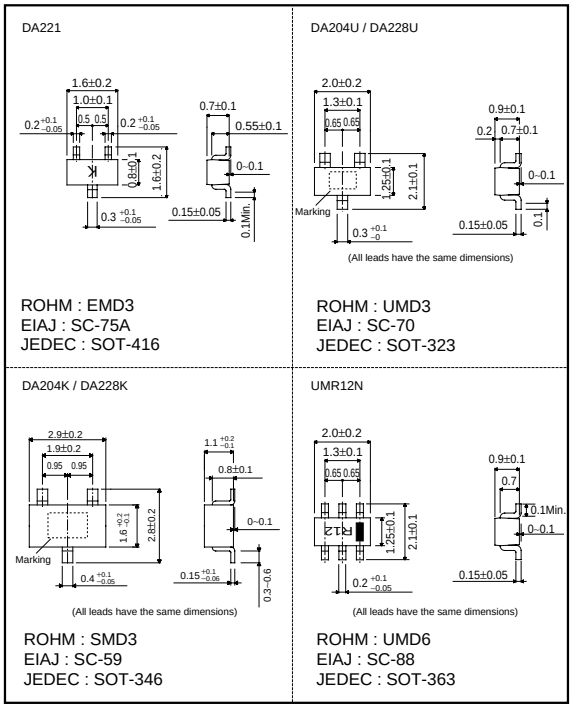
●Features
1) Three types of packages are available.
(EMD3,UMD3,SMD3)
2) Two diode elements are connected in series
($V_F \times 2$) per circuit.

●Construction
Silicon epitaxial planar

●Circuit



●External dimensions (Units : mm)



●Marking

EMD3		UMD3		UMD6		SMD3	
DA221	K	DA204U	K	UMR12N	R12	DA204K	K
–	–	DA228U	BU	–	–	DA228K	BU

●**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
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 V_F(V) Max.	Cond. I_F(mA)	Reverse current I_R(μA) Max.	Cond. V_R(V)	Fig.
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

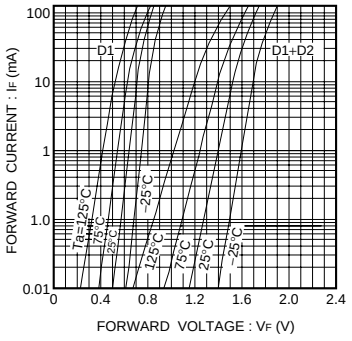


Fig.1 Forward characteristics

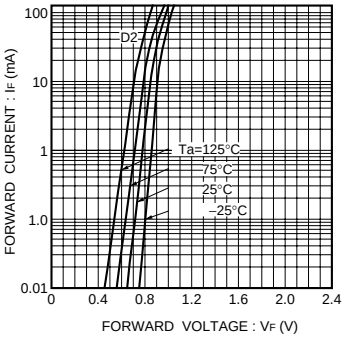


Fig.2 Forward characteristics

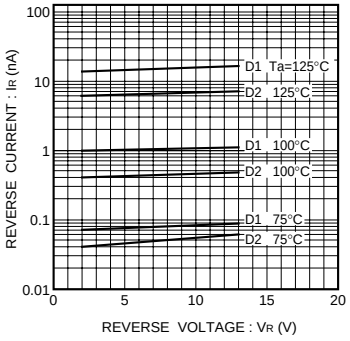


Fig.3 Reverse characteristics

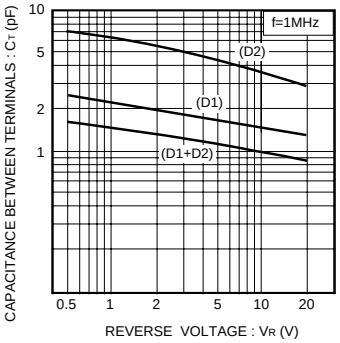


Fig.4 Capacitance between terminals characteristics

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

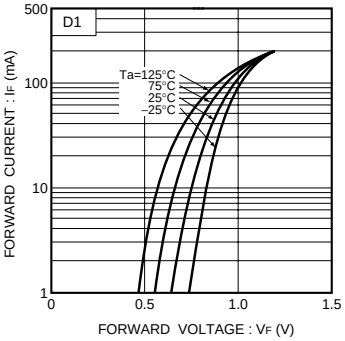


Fig.5 Forward characteristics

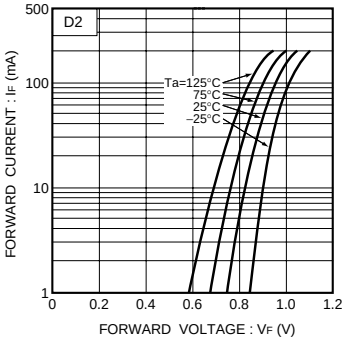


Fig.6 Forward characteristics

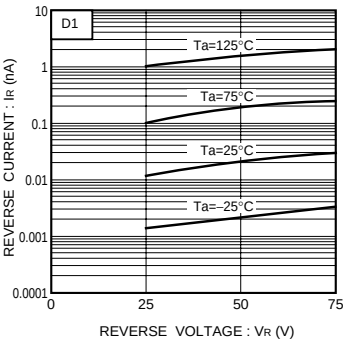


Fig.7 Reverse characteristics

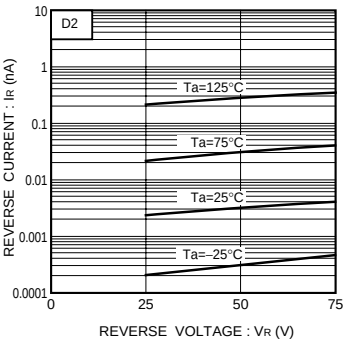


Fig.8 Reverse characteristics

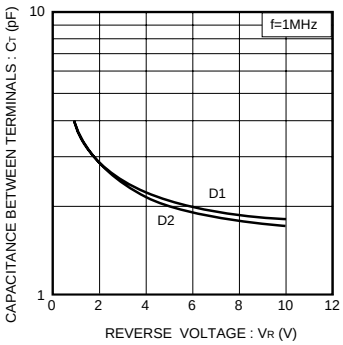


Fig.9 Capacitance between terminals characteristics