

FMN1 **IMN11** **UMP1N**
FMP1 **IMP11** **UMN11N**
IMN10 **UMN1N** **UMP11N**

Diode, array, high speed switching, surface mount

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

Dimensions (Units : mm)

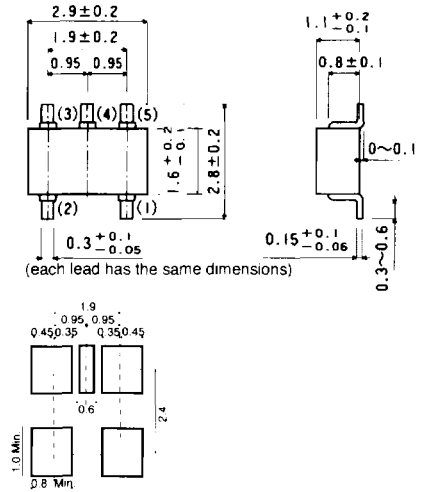
Features

- available in SMD5 (FMT), UMD5 (UM5), SMD6 (IMD), and UMD6 (UM6) packages
- parts are marked as follows:

FMN1 = N1	UMN1N = N1
FMP1 = P1	UMP1N = P1
IMN10 = N10	UMN11N = N11
IMN11 = N11	UMP11N = P11
IMP11 = P11	

- suitable for automatic mounting on printed circuit board
- all diodes in the chip have similar characteristics

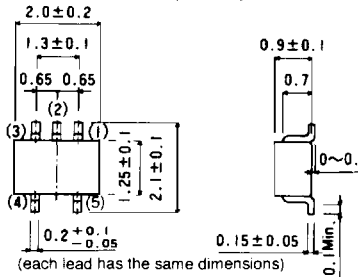
FMN1, FMP1 (SMD5)



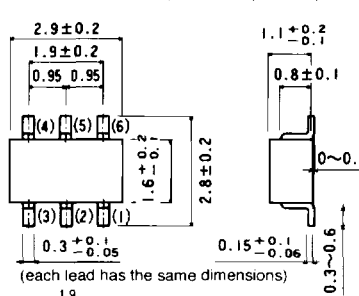
Applications

- high speed switching

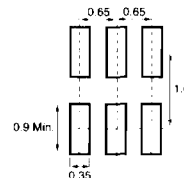
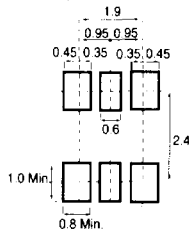
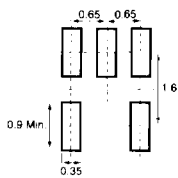
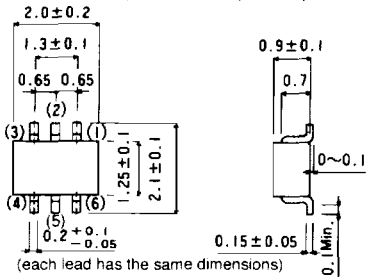
UMN1N, UMP1N (UMD5)



IMN10, IMN11, IMP11 (SMD6)

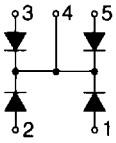


UMN11N, UMP11N (UMD6)

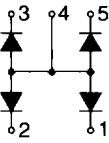


Equivalent circuits

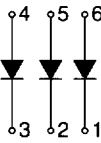
UMN1N



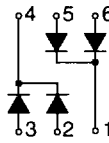
FMP1



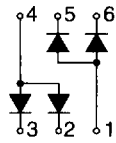
IMN10



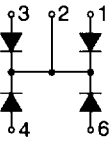
IMN11



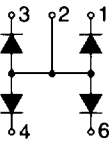
IMP11



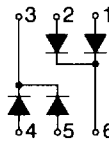
FMN1



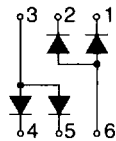
UMP1N



UMN11N



UMP11N



Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Part no.	Peak reverse voltage	DC reverse voltage	Peak forward current	Mean rectifying current	Surge current	Power dissipation	Junction temp.	Storage temp.
	V_{RM} (V)	V_R (V)	I_F (mA)	I_O (mA)	(1 μ s) I_{surge} (A)	(Total) P_d (mW)	T_j ($^\circ\text{C}$)	T_{stg} ($^\circ\text{C}$)
FMN1 UMN1N	80	80	80	25	0.25	80 150	150	-55 ~ + 150
FMP1 UMP1N	80	80	80	25	0.25	80 150	150	-55 ~ + 150
IMN10	80	80	300	100	4	300 ¹	150	-55 ~ + 150
IMN11 UMN11N	80	80	300	100	4	300 ¹ 150	150	-55 ~ + 150
IMP11 UMP11N	80	80	300	100	4	300 ¹ 150	150	-55 ~ + 150

¹: Not to exceed 200 mW per element

FMN1, FMP1, 1MN10, 1MN11, 1MP11, UMN1N, UMP1N, UMN11N, UMP11N Diode arrays

Electrical characteristics (unless otherwise noted, $T_a = 25^\circ\text{C}$)

Part no.	Forward voltage		Reverse current		Capacitance between terminals			Reverse recovery time			
	V_F (V) Max	I_F (mA)	I_B (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
FMN1 UMN1N	0.9	5	0.1	70	3.5	6	1	4	6	5	Figure 8
FMP1 UMP1N	0.9	5	0.1	70	3.5	6	1	4	6	5	Figure 8
1MN10	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
1MN11 UMN11N	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8
1MP11 UMP11N	1.2	100	0.1	70	3.5	6	1	4	6	5	Figure 8

Electrical characteristic curves

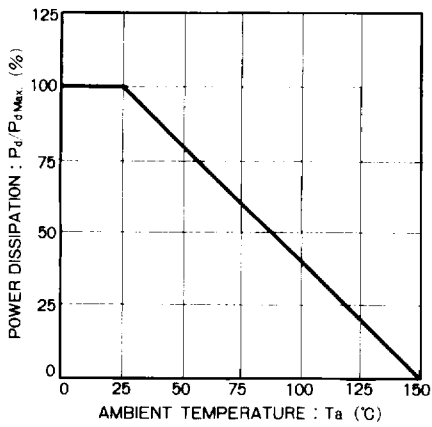


Figure 1

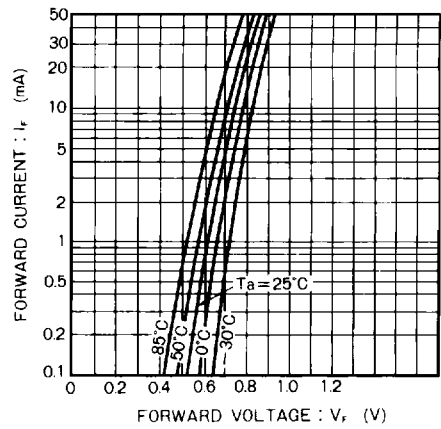


Figure 2

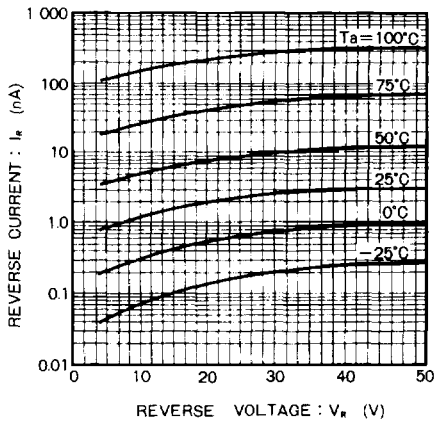


Figure 3

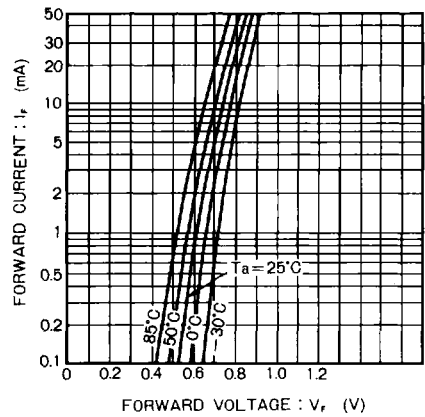


Figure 4

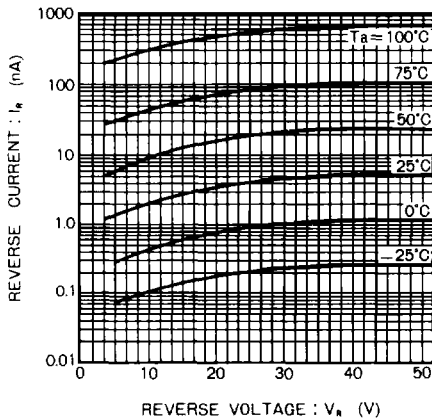


Figure 5

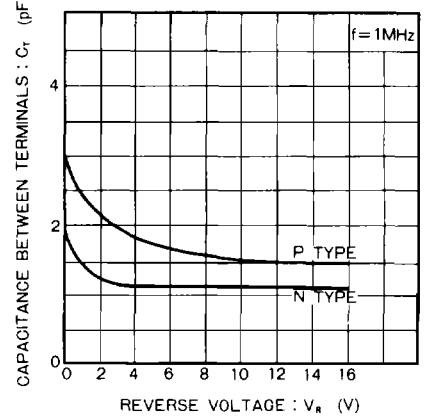


Figure 6

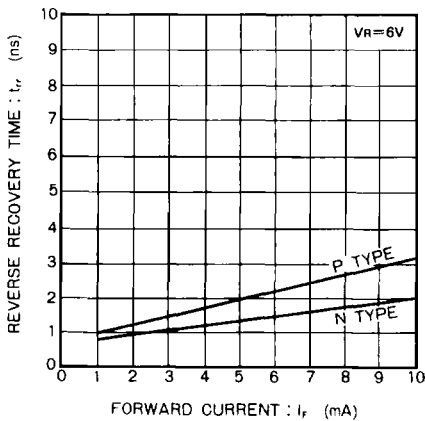


Figure 7

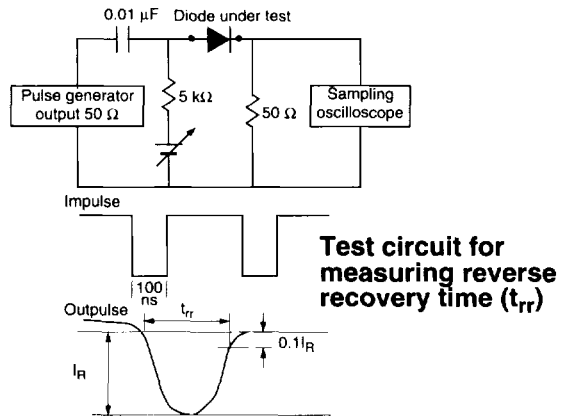


Figure 8