

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

Ultra high speed switching

- 1) A wide variety of configurations are available.
(UMD5, UMD6, SMD5, SMD6)
- 2) Multiple diodes in one small surface mount package.
- 3) Diode characteristics are matched in the package.

Silicon epitaxial planar

FMN1 / FMP1 (All leads have the same dimensions.) ROHM : SMD5 EIAJ : SC-74A JEDEC : — *Marking FMN1 : N1 FMP1 : P1	UMN1N / UMP1N (All leads have the same dimensions.) ROHM : UMD5 EIAJ : SC-88A JEDEC : SOT-353 *Marking UMN1N : N1 UMP1N : P1
IMN10 / IMN11 / IMP11 (All leads have the same dimensions.) ROHM : SMD6 EIAJ : SC-74 JEDEC : SOT-457 *Marking IMN10 : N10 IMN11 : N11 IMP11 : P11	UMN1N / UMP1N (All leads have the same dimensions.) ROHM : UMD6 EIAJ : SC-88 JEDEC : SOT-363 *Marking UMN11N : N11 UMP11N : P11

FMN1	FMP1	IMN10	IMN11	IMP11
SMD5 / SMD6 Package				
UMN1N	UMP1N	UMN11N	UMP11N	
UMD5 / UMD6 Package				

Diodes

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

●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 T _j (°C)	Storage temperature T _{stg} (°C)
FMN1 UMN1N	80	80	80	25	0.25	150/80	150	-55~+150
FMP1 UMP1N	80	80	80	25	0.25	150/80	150	-55~+150
IMN10	80	80	300	100	4	300 *1	150	-55~+150
IMN11 UMN11N	80	80	300	100	4	150 *2	150	-55~+150
IMP11 UMP11N	80	80	300	100	4	150 *2	150	-55~+150

*1 Not to exceed 200mW per element.

*2 Not to exceed 120mW per element.

●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.		t _{rr} (ns) Max.	Cond.	
						V _R (V)	f (MHz)		V _R (V)	I _F (mA)
FMN1 UMN1N	0.9	5	0.1	70	3.5	6	1	4	6	5
FMP1 UMP1N	0.9	5	0.1	70	3.5	6	1	4	6	5
IMN10	1.2	100	0.1	70	3.5	6	1	4	6	5
IMN11 UMN11N	1.2	100	0.1	70	3.5	6	1	4	6	5
IMP11 UMP11N	1.2	100	0.1	70	3.5	6	1	4	6	5

●Electrical characteristic curves (Ta=25°C)

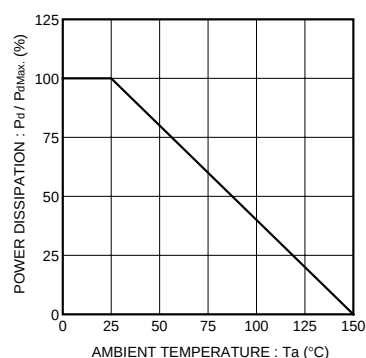


Fig.1 Power reduction curve

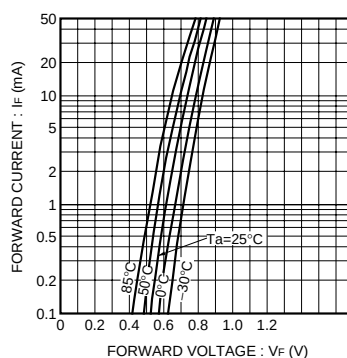


Fig.2 Forward characteristics
(P Type)

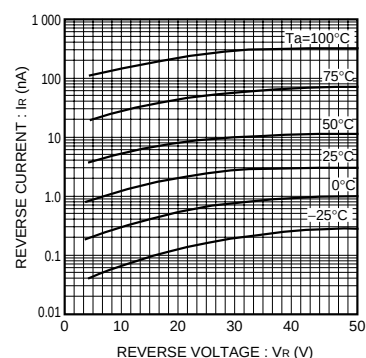


Fig.3 Reverse characteristics
(P Type)

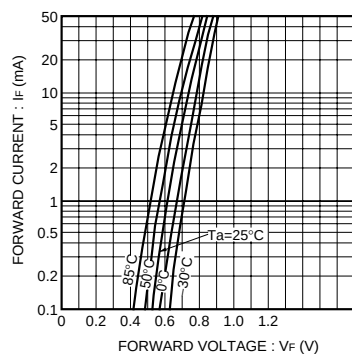
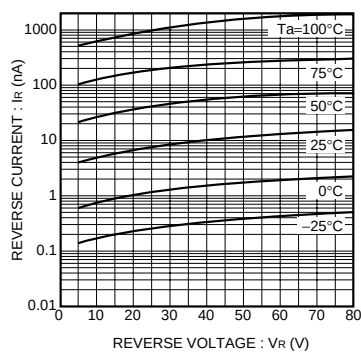
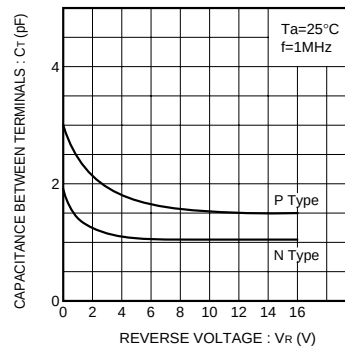
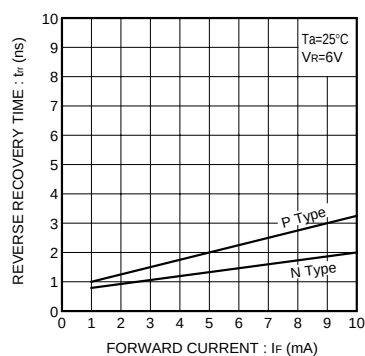
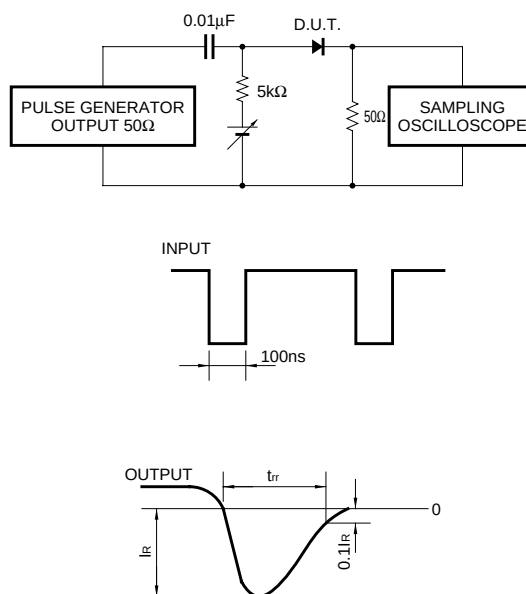
Fig.4 Forward characteristics
(N Type)Fig.5 Reverse characteristics
(N Type)Fig.6 Capacitance between
terminals characteristics

Fig.7 Reverse recovery time

Fig.8 Reverse recovery time (t_r) measurement circuit