

Switching Diode

UMP1N

●Applications

Ultra high speed switching

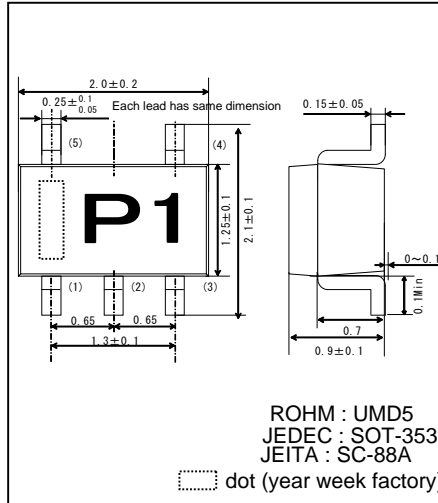
●Features

- 1) Small mold type. (UMD5)
- 2) High reliability.

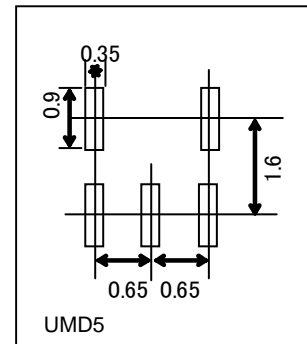
●Construction

Silicon epitaxial planar

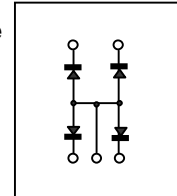
●Dimensions (Unit : mm)



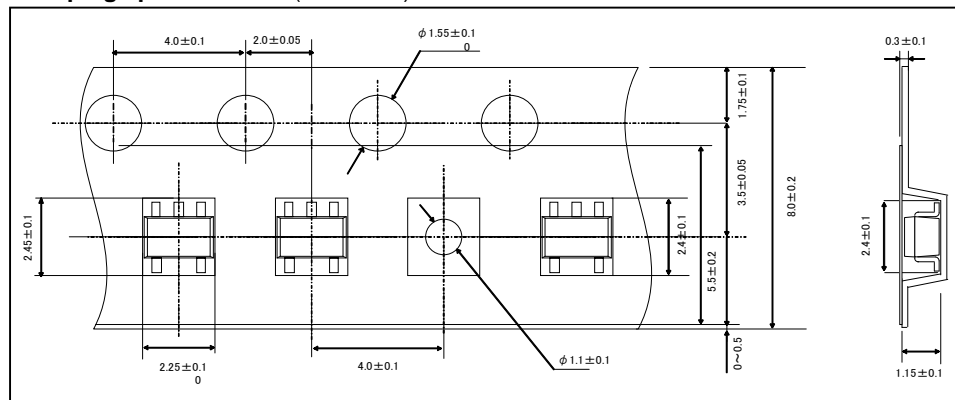
●Land size figure (Unit : mm)



●Structure



●Taping specifications (Unit : mm)

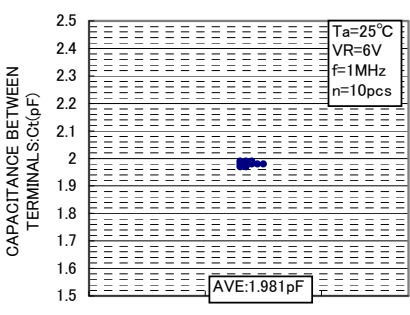
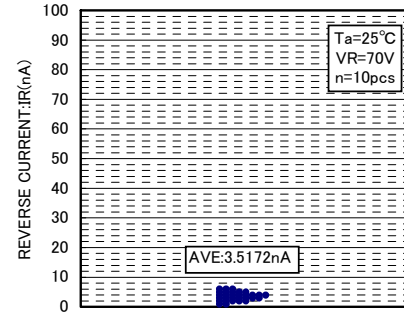
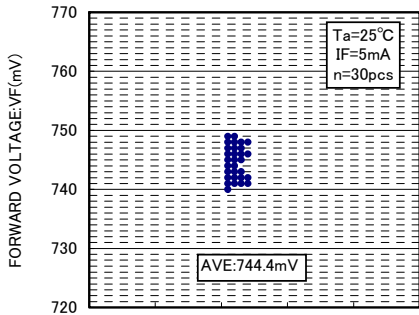
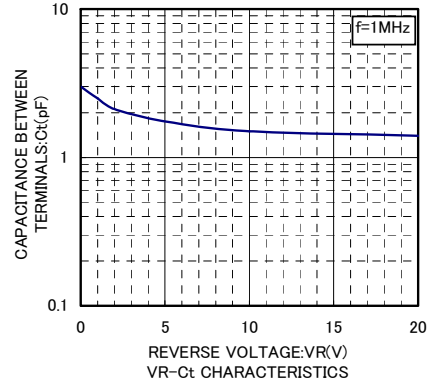
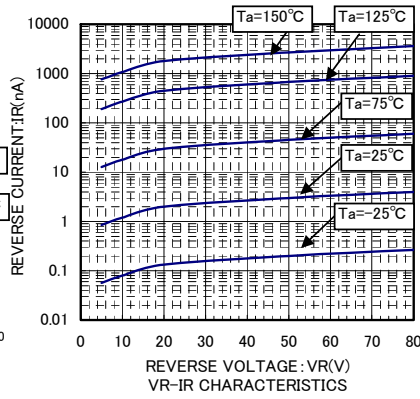
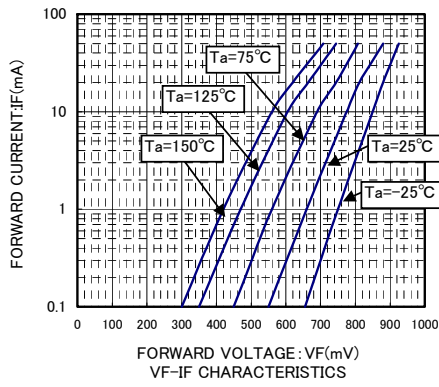


●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	80	V
Reverse voltage (DC)	V_R	80	V
Forward current (Single)	I_{FM}	80	mA
Average rectified forward current (single)	I_o	25	mA
Surge current (t=1us)	I_{surge}	250	mA
Power dissipation	P_d	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

●Electrical characteristics (Ta=25°C)

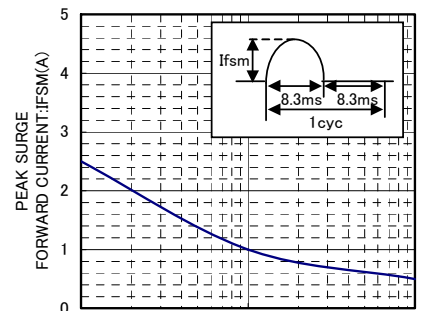
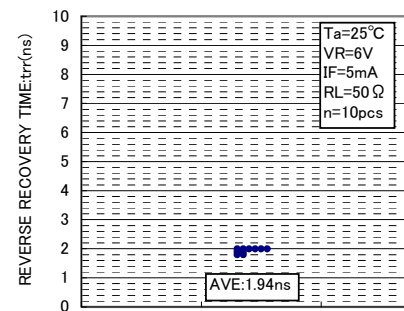
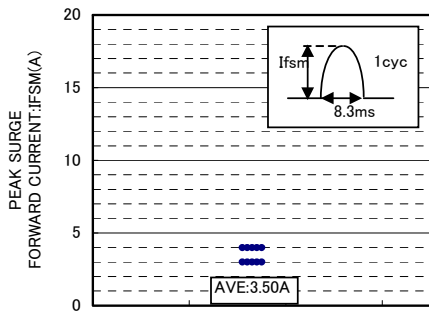
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.9	V	$I_F=5mA$
Reverse current	I_R	-	-	0.1	μA	$V_R=70V$
Capacitance between terminals	C_t	-	-	3.5	pF	$V_R=6V, f=1MHz$
Reverse recovery time	t_{rr}	-	-	4	ns	$V_R=6V, I_F=5mA, R_L=50Ω$



VF DISPERSION MAP

IR DISPERSION MAP

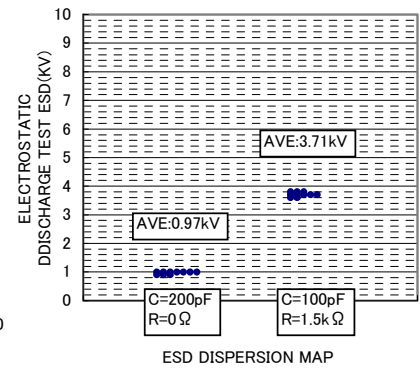
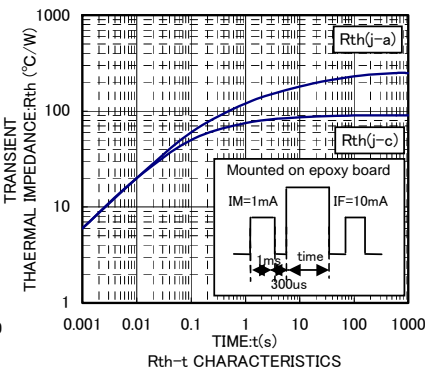
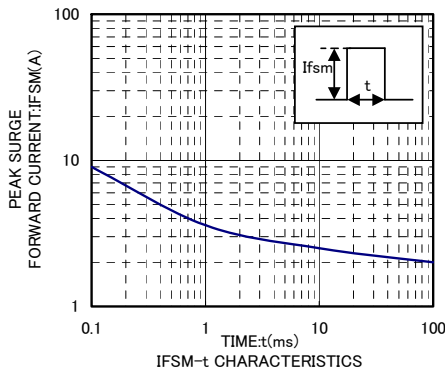
Ct DISPERSION MAP



IFSM DISERSION MAP

trr DISPERSION MAP

IFSM-CYCLE CHARACTERISTICS



IFSM-t CHARACTERISTICS

Rth-t CHARACTERISTICS

ESD DISPERSION MAP

Notes

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