

Switching diode

IMN10

●Application

Ultra high speed switching

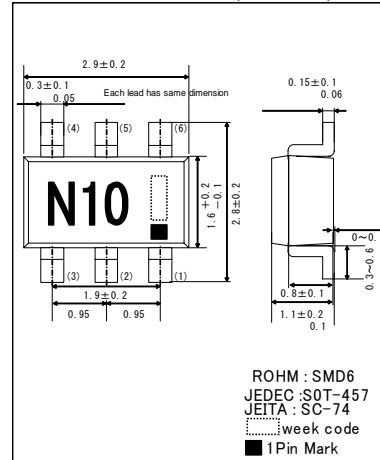
●Features

- 1) Small mold type. (SMD6)
- 2) High reliability

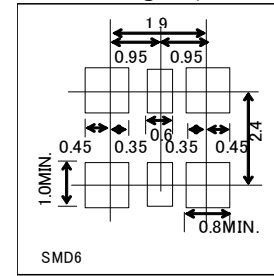
●Construction

Silicon epitaxial planar

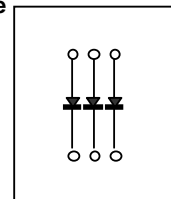
●External dimensions (Unit : mm)



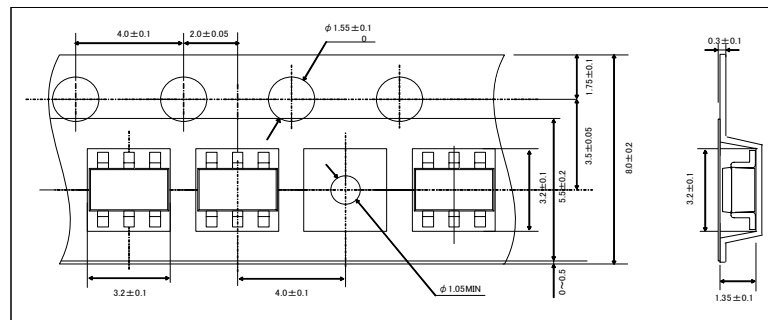
●Land size figure (Unit : mm)



●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}	300	mA
Forward current (Double)	I_{FM}	450	mA
Average rectified forward current (single)	I_o	100	mA
Surge current (t=1us)	I_{surge}	4	A
Power dissipation (TOTAL)(*1)	P_d	300	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

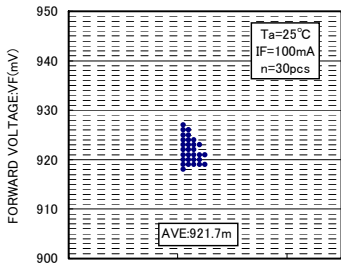
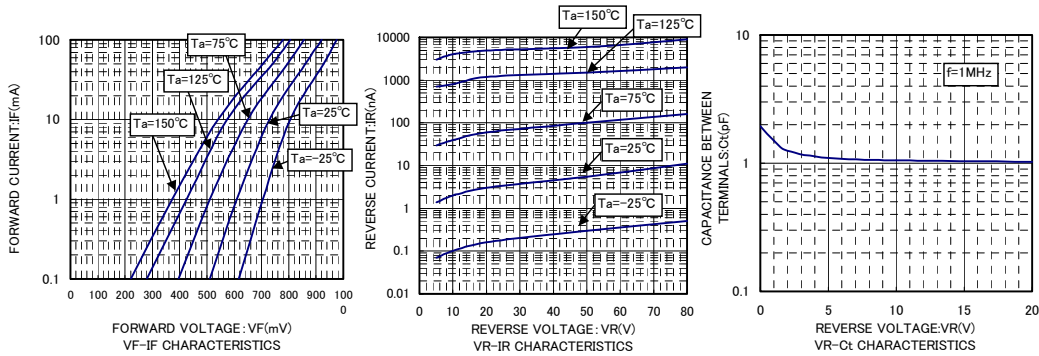
(*1) Not exceed 200mW per element.

●Electrical characteristics (Ta=25°C)

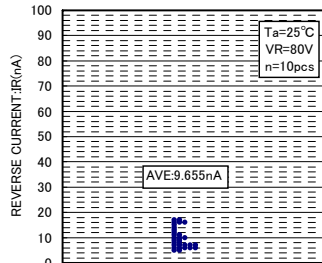
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	1.2	V	$I_F=100mA$
Reverse current	I_R	-	-	0.1	μA	$V_R=70V$
Capacitance between terminals	C_t	-	-	3.5	pF	$V_R=6V, f=1MHz$
Reverse recovery time	t_{rr}	-	-	4	ns	$V_R=6V, I_F=5mA, R_L=50\Omega$

Diodes

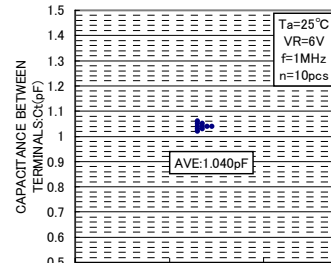
● Electrical characteristic curves (Ta=25°C)



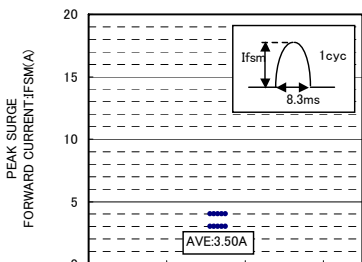
VF DISPERSION MAP



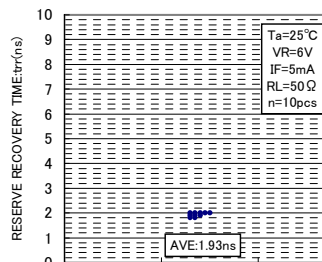
IR DISPERSION MAP



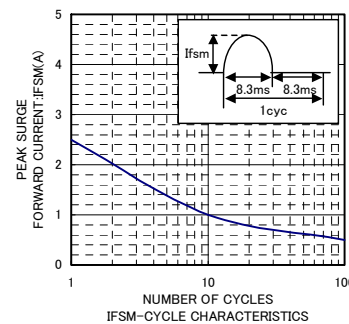
Ct DISPERSION MAP



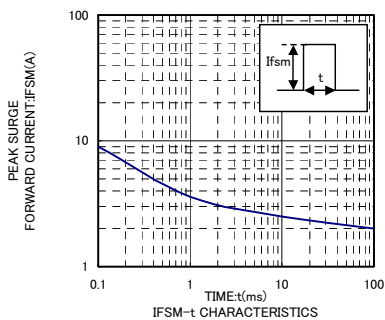
IFSM DISPERSION MAP



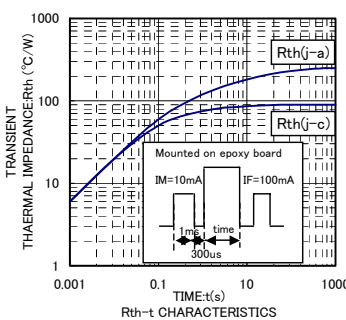
trr DISPERSION MAP



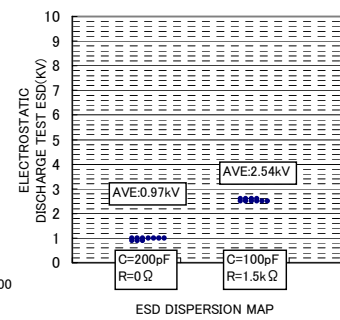
IFSM-CYCLE CHARACTERISTICS



IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS



ESD DISPERSION MAP

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