Switching diode IMN11

Application

Ultra high speed switching

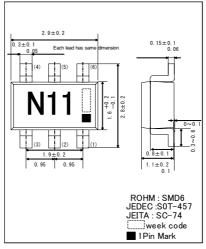
Features

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

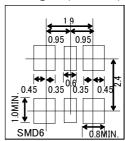
Construction

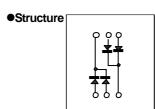
Silicon epitaxial planar

●External dimensions (Unit : mm)

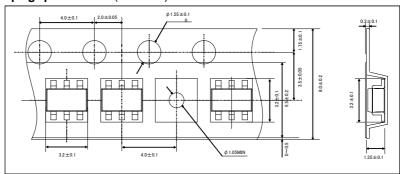


●Land size figure (Unit : mm)





● 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
Average rectified forward current (Single)	lo	100	mA
Surge current (t=1us) (Single)	I _{surge}	4	Α
Power dissipation (TOTAL) (*1)	Pd	300	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

^(*1) Not to exceed 200mW per element.

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	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	Ct	-	-	3.5	pF	V _R =6V , f=1MHz
Reverse recovery time	trr	-	-	4	ns	V_R =6V , IF=5mA , RL=50 Ω

●Electrical characteristic curves (Ta=25°C) Ta=150°C Ta=125°C 10000 FORWARD CURRENT:IF(mA) CAPACITANCE BETWEEN TERMINALS:Ot(pF) REVERSE CURRENT:IR(nA) 10 0.1 0.1 20 30 40 50 60 REVERSE VOLTAGE: VR(V) VR-IR CHARACTERISTICS 0 80 0 FORWARD VOLTAGE: VF(mV) VF-IF CHARACTERISTICS REVERSE VOLTAGE:VR(V) VR-Ct CHARACTERISTICS Ta=25°C VR=6V 1.4 90 Ta=25°C Ta=25°C FORWARD VOLTAGE:VF(mV) IF=100mA VR=80V 1.3 80 REVERSE CURRENT:IR(nA) CAPACITANCE BETWEEN n=10pcs 1.2 70 TERMINALS: Ct(pF) 1.1 930 60 50 920 40 AVE:1.040pF 0.8 30 0.7 910 20 AVE:921.7m 0.6 10 900 VF DISPERSION MAP IR DISPERSION MAP Ct DISPERSION MAP 20 Ta=25°C VR=6V RESERVE RECOVERY TIME:trr(ns) PEAK SURGE FORWARD CURRENT:IFSM(A) PEAK SURGE FORWARD CURRENT:IFSM(A) 8 15 RL=50 Ω 10 AVE:3.50A 0 0 10 NUMBER OF CYCLES IFSM DISRESION MAP trr DISPERSION MAP 1000 TRANSIENT THAERMAL IMPEDANCE:Rth (°C/W) PEAK SURGE FORWARD CURRENT:IFSM(A) Rth(j-c) 10 10 0.1 1 TIME:t(ms) 10 0.1 TIME:t(s) 10 ESD DISPERSION MAP IFSM-t CHARACTERISTICS Rth-t CHARACTERISTICS

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