Switching diode

DAN202K

Applications

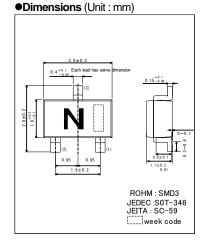
Ultra high speed switching

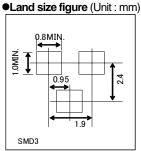
● Features

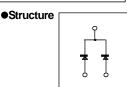
- 1) Small mold type. (SMD3)
- 2) High reliability

Construction

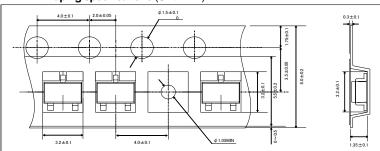
Silicon epitaxial planar







● Taping specifications (Unit: mm)



● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repatitive 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)	lo	100	mA
Average rectified forward current (double)	lo	150	mA
Surge current (t=1us) (Single)	I _{surge}	4	Α
Surge current (t=1us) (Double)	I _{surge}	6	Α
Power dissipation	Pd	200	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

●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

Rev.C

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●Electrical characteristic curves (Ta=25°C) Ta=150°C 10000 =1MHz FORWARD CURRENT:IF(mA) CAPACITANCE BETWEEN TERMINALS:Ct(pF) REVERSE CURRENT:IR(r 0.01 20 30 40 50 60 REVERSE VOLTAGE:VR(V) VR-IR CHARACTERISTICS 0 5 10 15 REVERSE VOLTAGE:VR(V) VR-Ct CHARACTERISTICS 80 0 FORWARD VOLTAGE: VF(mV) VF-IF CHARACTERISTICS Ta=25°C VR=80V Ta=25°C Ta=25°C 90 IF=100mA FORWARD VOLTAGE:VF(mV) 940 80 REVERSE CURRENT:IR(nA) n=30pcs f=1MHz n=10pcs 70 930 60 50 920 40 AVE:9.655nA 30 AVE:1.17pF 910 20 AVE:921.7m 10 900 VF DISPERSION MAP IR DISPERSION MAP Ct DISPERSION MAP Ta=25°C VR=6V IF=5mA RL=50Ω PEAK SURGE FORWARD CURRENT:IFSM(A) PEAK SURGE FORWARD CURRENT:IFSM(A) 3 AVE:3.50A AVE:1.93ns 10 NUMBER OF CYCLES IFSM-CYCLE CHARACTERISTICS IFSM DISPERSION MAP trr DISPERSION MAP 1000 TRANSIENT THAERMAL IMPEDANCE:Rth (°C/W) FORWARD CURRENT:IFSM(A) 100 Rth(j-c AVE:0.97kV 0.1 1 TIME:t(ms) TIME:t(ms) IFSM-t CHARACTERISTICS ESD DISPERSION MAP Rth-t CHARACTERISTICS

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Appendix1-Rev2.0