Switching diode

DAN222

Application

Ultra high speed switching

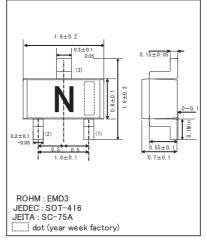
Features

- 1) Ultra small mold type. (EMD3)
- 2) High reliability.

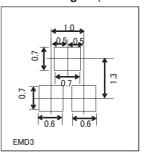
Construction

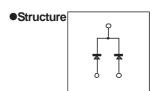
Silicon epitaxial planar

●External dimensions (Unit : mm)

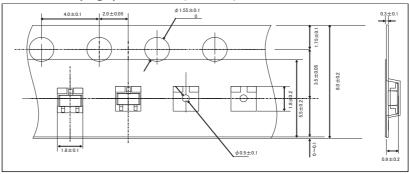


●Land size figure (Unit : mm)





● Taping specifications (Unit : mm)



● Absolute maximum ratings (Ta=25°C)

PADSOIDLE MAXIMUM ratings (1a-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 voltage (single)	lo	100	mA
Surge current (t=1us)	I _{surge}	4	Α
Power dissipation	Pd	150	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C
Rated in slash put frequency	f	100	MHz

●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	μΑ	V _R =70V
Capacitance between terminals	Ct	-	-	3.5	pF	V _R =6V , f=1MHz
Reverse recovery time	trr	-	-	4	ns	V_R =6 V , IF=5 mA , RL=50 Ω

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

Notes

- No technical content pages of this document may be reproduced in any form or transmitted by any
 means without prior permission of ROHM CO.,LTD.
- The contents described herein are subject to change without notice. The specifications for the product described in this document are for reference only. Upon actual use, therefore, please request that specifications to be separately delivered.
- Application circuit diagrams and circuit constants contained herein are shown as examples of standard
 use and operation. Please pay careful attention to the peripheral conditions when designing circuits
 and deciding upon circuit constants in the set.
- Any data, including, but not limited to application circuit diagrams information, described herein are intended only as illustrations of such devices and not as the specifications for such devices. ROHM CO.,LTD. disclaims any warranty that any use of such devices shall be free from infringement of any third party's intellectual property rights or other proprietary rights, and further, assumes no liability of whatsoever nature in the event of any such infringement, or arising from or connected with or related to the use of such devices.
- Upon the sale of any such devices, other than for buyer's right to use such devices itself, resell or
 otherwise dispose of the same, no express or implied right or license to practice or commercially
 exploit any intellectual property rights or other proprietary rights owned or controlled by
- ROHM CO., LTD. is granted to any such buyer.
- Products listed in this document are no antiradiation design.

The products listed in this document are designed to be used with ordinary electronic equipment or devices (such as audio visual equipment, office-automation equipment, communications devices, electrical appliances and electronic toys).

Should you intend to use these products with equipment or devices which require an extremely high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult with our sales representative in advance.

About Export Control Order in Japan

Products described herein are the objects of controlled goods in Annex 1 (Item 16) of Export Trade Control Order in Japan.

In case of export from Japan, please confirm if it applies to "objective" criteria or an "informed" (by MITI clause) on the basis of "catch all controls for Non-Proliferation of Weapons of Mass Destruction.

