Fast recovery diode RF101A2S

Applications

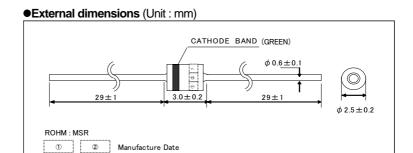
General rectification

● Features

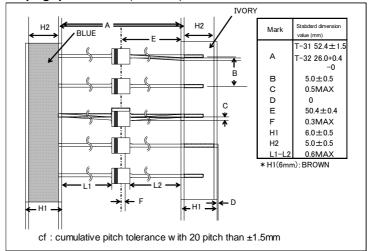
- 1) Cylindrical mold type. (MSR)
- 2) Ultra Low VF.
- 3) Ultra high switching.
- 4) Low switching loss.
- 5) High ESD.

●Construction

Silicon epitaxial planar



●Taping specifications (Unit : mm)



● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	200	V
Reverse voltage (DC)	V_R	200	V
Average rectified forward current (*1)	lo	1	Α
Forward current surge peak (t=100µs)	I _{FSM}	20	Α
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

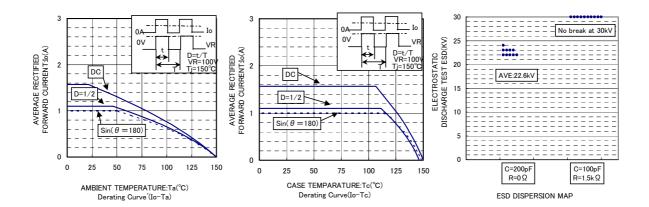
^(*1) Mounted on epoxy board. 180°Half sine wave

●Electrical characteristic (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Forward voltage	V_{F}	-	0.815	0.87	V	I _F =1.0A
Reverse current	I _R	-	0.01	10	μΑ	V _R =200V
Reverse recovery time	trr	-	12	25	ns	I _F =0.5A,I _R =1A,Irr=0.25*I _R



Electrical characteristic curves 10000 f=1MHz 1000 FORWARD CURRENT:IF(A) REVERSE CURRENT:IR(nA) CAPACITANCE BETWEEN TERMINALS:Ct(pF) 0.1 100 0.01 Ta=25°C 0.01 0.001 50 100 150 REVERSE VOLTAGE: VR(V) 100 200 300 400 500 600 700 800 900 FORWARD VOLTAGE: VF(mV) 0 0 5 10 15 20 REVERSE VOLTAGE:VR(V) VR-IR CHARACTERISTICS VR-Ct CHARACTERISTICS 850 100 100 Ta=25°C IF=1A Ta=25°C Ta=25°C 90 f=1MHz VR=200V FORWARD VOLTAGE: VF(mV) 840 REVERSE CURRENT:IR(nA) 0 0 0 0 0 08 n=30pc CAPACITANCE BETWEEN 80 VR=0V n=10pcs 820 30 810 AVE:818.6mV 20 10 VF DISPERSION MAP IR DISPERSION MAP Ct DISPERSION MAP 200 PEAK SURGE FORWARD GURRENTIFSM(A) Ta=25°C IF=0.5A IR=1A Irr=0.25*IF RESERVE RECOVERY TIME:trr(ns) PEAK SURGE FORWARD CURRENT:IFSM(A) 150 n=10pcs 1cyc 100 50 trr DISPERSION MAP IFSM DISRESION MAP NUMBER OF CYCLES IFSM-CYCLE CHARACTERISTICS THAERMAL IMPEDANCE:Rh (°C/W) PEAK SURGE FORWARD CURRENT:IFSM(A) 1.5 FORWARD POWER DISSIPATION:Pf(W) 0 10 0 1.5 0.001 0.01 0.1 10 100 1000 TIME:t(ms) TIME:t(s) IFSM-t CHARACTERISTICS Rth-t CHARACTERISTICS AVERAGE RECTIFIED FORWARD CURRENT: Io(A) Io-Pf CHARACTERISTICS



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