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Rohm Semiconductor RF103L2STE25

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Diodes

RF103L2S

Fast recovery Diode

RF103L2S

Applications

High frequency rectification

Features

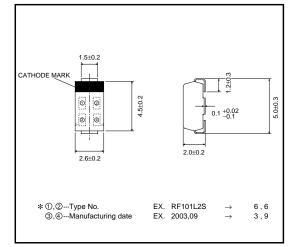
1) Small power mold type (PMDS)

- 2) Ultra low VF
- 3) Very fast recovery
- 4) Low switching loss

Construction

Silicon epitaxial planar

•External dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	Vrm	200	V
Reverse voltage (DC)	VR	200	V
Average rectified forward current *	lo	1.0	A
Forward Peak surge current (60Hz · 1cyc.)	IFSM	20	A
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-40 to +150	°C

* Mounting on glass epoxi board

•Electrical characteristics (Ta=25°C)

Parameter	Symbol	Тур.	Max.	Unit	Conditions
Forward voltage	VF	0.860	0.920	V	IF=1.0A
Reverse current	IR	1.2	10	μA	Vr=200V
Reverse recovery time	trr	9	20	nS	IF=0.5A
					IR=1.0A
					Irr=0.25×IR





Distributor of Rohm Semiconductor: Excellent Integrated System Limited Datasheet of RF103L2STE25 - DIODE GEN PURP 200V 1A PMDS Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

Diodes

characteristics

●Electrical characteristic curves (Ta=25°C) 2.0 100 125°C AVERAGE RECTIFIED CURRENT : 10 (A) 1.8 FORWARD CURRENT : IF (mA) REVERSE CURRENT : IR (µA) DC 1.6 10 1.4 75°C 0.1 D=1/2 1.2 1.0 Sin(θ=180) 125°0 25°C 0.8 0.01 0.6 25°C 0.4 0 -25°C –25°C 0.2 0 k 0 0.001 L 0.01L 125 100 200 25 100 0.3 0.4 0.6 0.8 50 150 50 75 FORWARD VOLTAGE : VF (V) REVERSE VOLTAGE : VR (V) AMBIENT TEMPERATURE : Ta (°C) Fig.2 Reverse temperature Fig.1 Forward temperature Fig.3 Derating curve characteristics characteristics 1. 2 10 CAPACITANCE BETWEEN TERMINALS: C_{T} (pF) FORWARD CURRENT : IFSM (A) FORWARD POWER DISSIPATION : PF (W) 1.2 20 1.0 15 0.8 Sin(10 0.6 10 0.4 SURGE 0.2 0 0 0 10 100 5 10 15 20 25 30 AVERAGE RECTIFIED FORWARD CURRENT : Io (A) REVERSE VOLTAGE : VR (V) CYCLE Fig.5 Powerd peak surge current Fig. 4 Power dissipation Fig. 6 Capacirance between terminals

RF103L2S

characteristics



Appendix

Notes

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