



SANYO Semiconductors

DATA SHEET

RD2004LN

 — Diffused Junction Silicon Diode

Ultrahigh-Speed Switching Diode

Features

- High breakdown voltage (VRRM=400V).
- High reliability.
- One-point fixing type plastic molded package facilitating easy mounting and heat dissipation.
- Fast forward / reverse recovery time.

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		400	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		400	V
Average Output Current	IO		20	A
Peak Output Current	IOP	PW≤100μs, duty≤50%	80	A
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	180	A
Junction Temperature	TJ		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	VR	IR=1mA	400			V
Forward Voltage	VF	IF=20A			1.5	V
Reverse Current	IR	VR=400V			100	μA
Reverse Recovery Time	trr	IF=10A, di / dt=100A/μs			50	ns
Thermal Resistance	Rth(j-c)	Junction-Case : Smoothed DC			4.0	°C / W

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Package Dimensions

unit : mm (typ)

7509-004

