

# SANYO Semiconductors DATA SHEET

# RD1004LS-SB5 —

Diffused Junction Type Silicon Diode
Ultrahigh-Speed Switching Diode

## Features

- High breakdown voltage (VRRM=400V).
- High reliability.
- Easy to be mounted, good heat dissipation.
- Fast reverse recovery time.
- Low noise at the time of reverse recovery.

## **Specifications**

#### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		400	V
Non-repetitive Peak Reverse Voltage	V <sub>RSM</sub>		400	V
Average Output Current	lo		10	A
R.M.S Forward Current	I <sub>F</sub> (RMS)	Tc=25°C (SANYO's ideal heat dissipation condition) Package limited	12	Α
Surge Forward Current	IFSM	Sine wave, 10ms single pulse	120	Α
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

#### Electrical Characteristics at Ta=25°C

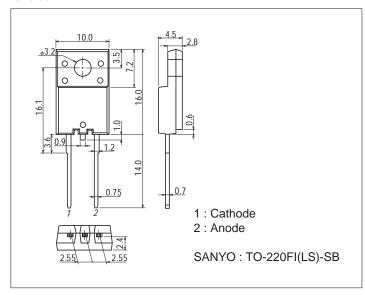
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Unit
Reverse Voltage	VR	IR=1mA	400			V
Forward Voltage	VF	IF=10A		1.3	1.5	V
Reverse Current	IR	V <sub>R</sub> =400V			100	μΑ
Reverse Recovery Time	t <sub>rr</sub> 1	IF=10A, di / dt=100A/µs		44	50	ns
	t <sub>rr</sub> 2	I <sub>F</sub> =0.5A, I <sub>R</sub> =1A		17		ns
Thermal Resistance	Rth(j-c)	Between the junction part and the case : smoothing current			6.25	°C/W

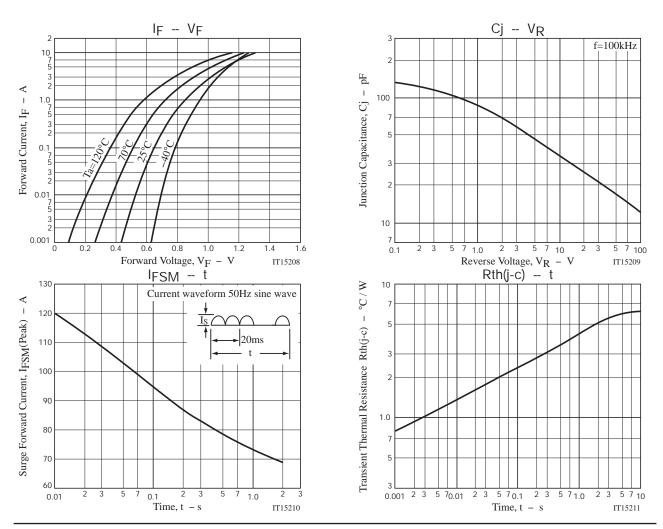
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#### Package Dimensions

unit : mm (typ) 7510-001





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