



SANYO Semiconductors

## DATA SHEET

# RD2003JN

 — Diffused Junction Silicon Diode  
**Low VF · High-Speed Switching Diode**

## Features

- High breakdown voltage ( $V_{RRM}=300V$ ).
- High reliability.
- Fast forward / reverse recovery time.
- Low noise at the time of reverse recovery.
- Attachment workability is good by Mica-less package.

## Specifications

Absolute Maximum Ratings at  $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		300	V
Average Output Current	$I_O$		20	A
R.M.S Forward Current	$I_F(RMS)$		25	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave 1 cycle	180	A
Junction Temperature	$T_j$		150	$^\circ C$
Storage Temperature	$T_{stg}$		-55 to +150	$^\circ C$

Electrical Characteristics at  $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=1mA$	300			V
Forward Voltage	$V_F$	$I_F=20A$		1.15	1.3	V
Reverse Current	$I_R$	$V_R=300V$			100	$\mu A$
Reverse Recovery Time	$t_{rr1}$	$I_F=10A, di/dt=100A/\mu s$			60	ns
	$t_{rr2}$	$I_F=0.5A, I_R=1A$		20		ns
Thermal Resistance	$R_{th(j-c)}$	Junction-Case : Smoothed DC			4.0	$^\circ C / W$

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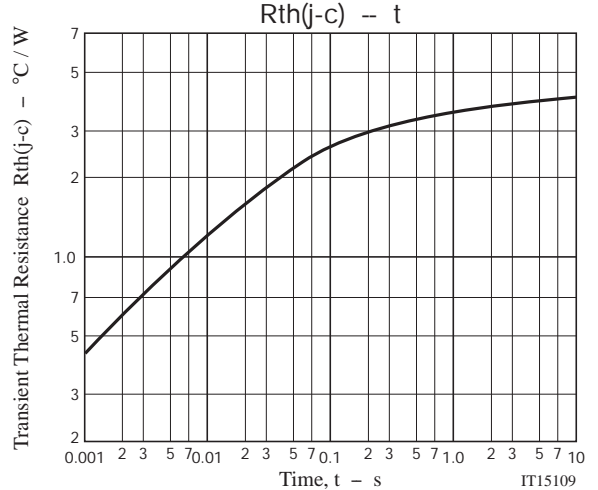
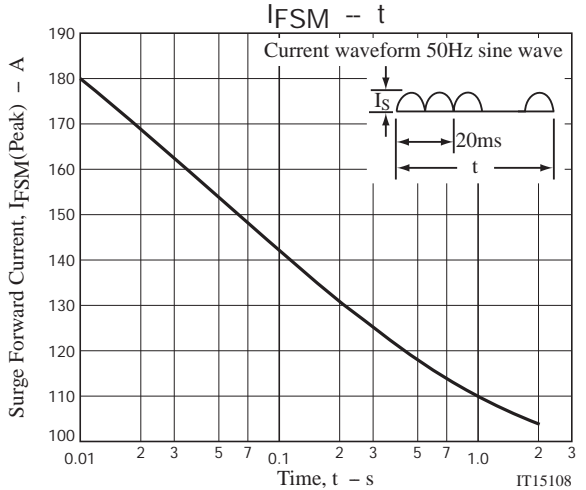
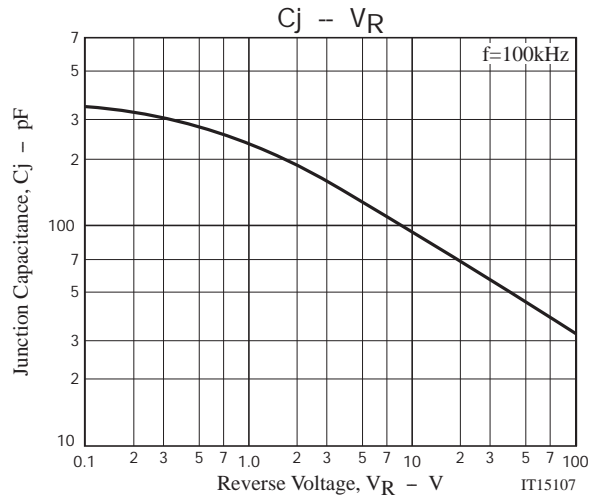
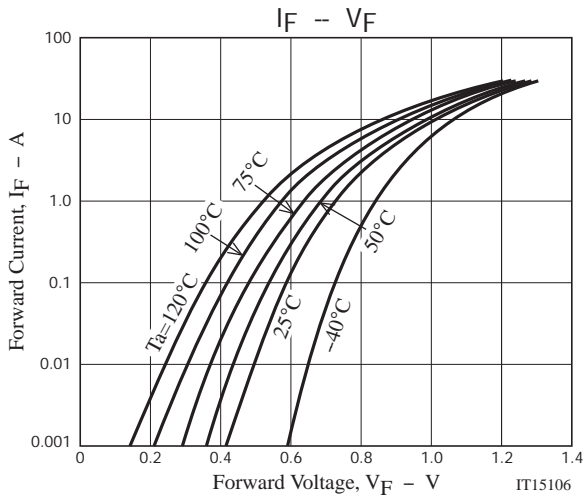
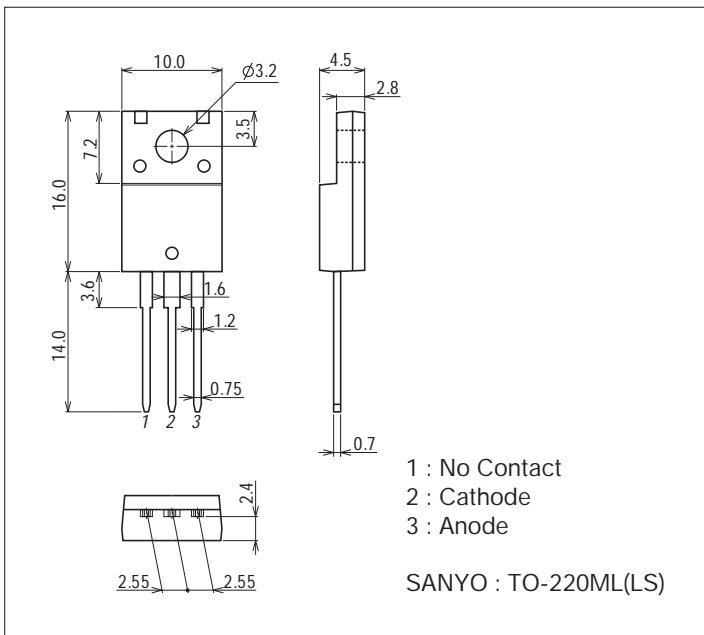
**SANYO Semiconductor Co., Ltd.**

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Package Dimensions

unit : mm (typ)

7525-003



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