



SANYO Semiconductors

DATA SHEET

# RG2006JN — Diffused Junction Silicon Diode

## Low VF · High-Speed Switching Diode

### Features

- $V_{RRM}=600V$
- $t_{rr}=16ns$  (typ.)
- Low noise at the time of reverse recovery

### Specifications

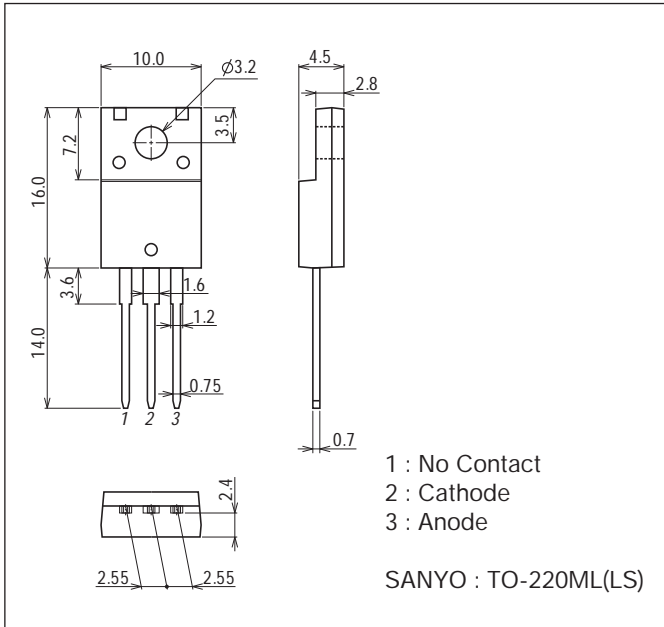
Absolute Maximum Ratings at  $T_a=25^{\circ}C$

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		600	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$	$PW \leq 100\mu s, duty \leq 0.1$	600	V
Average Output Current	$I_O$		20	A
Peak Output Current	$I_{OP}$	$PW \leq 100\mu s, duty\ cycle \leq 50\%$	40	A
Surge Forward Current	$I_{FSM}$	Sine wave, 10ms	180	A
Junction Temperature	$T_j$		150	$^{\circ}C$
Storage Temperature	$T_{stg}$		-55 to +150	$^{\circ}C$

### Package Dimensions

unit : mm (typ)

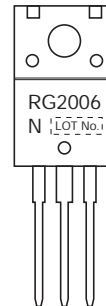
7525-003



### Product & Package Information

- Package : TO-220ML(LS)
- JEITA, JEDEC : SC-67, SOT186A
- Minimum Packing Quantity : 100 pcs./bag, 50 pcs./magazine

### Marking



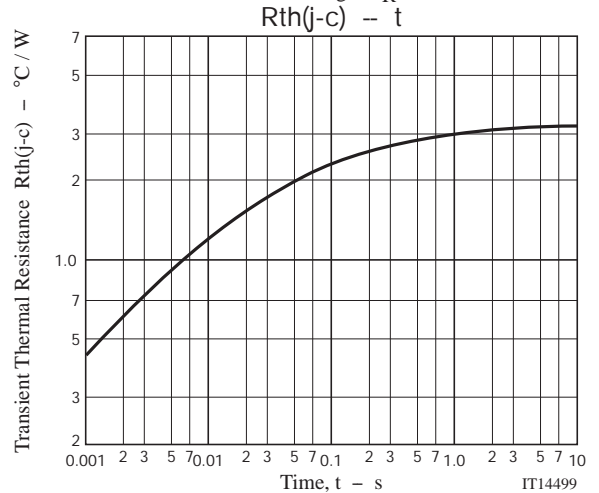
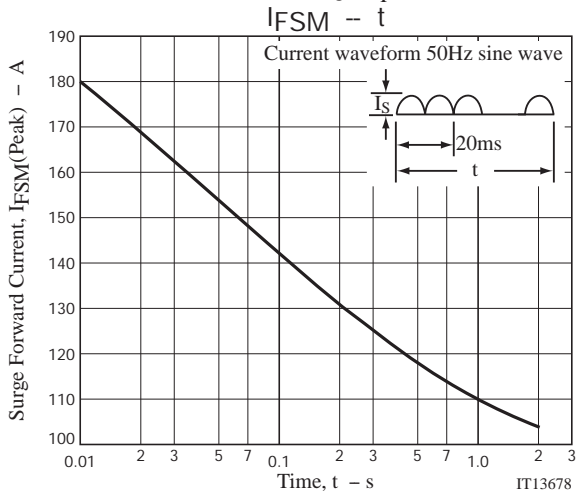
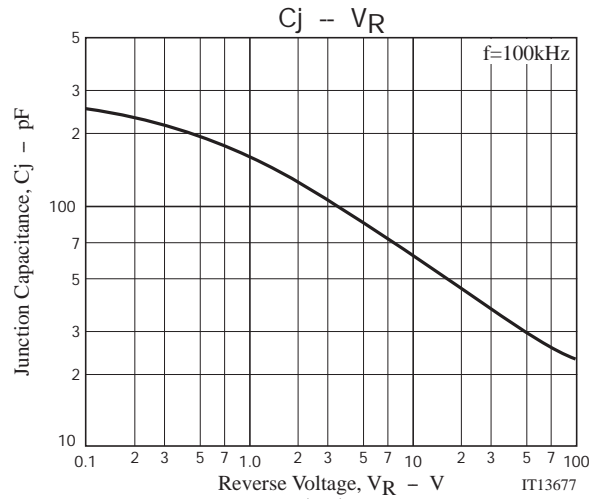
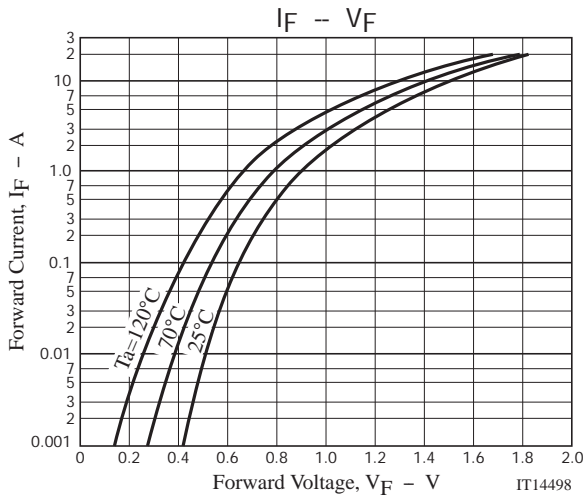
### Electrical Connection



# RG2006JN

## Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=1mA$	600			V
Forward Voltage	$V_{F1}$	$I_F=10A$		1.45	1.6	V
	$V_{F2}$	$I_F=20A$		1.8	2.1	V
Reverse Current	$I_R$	$V_R=600V$			10	$\mu A$
Reverse Recovery Time	$t_{rr1}$	$I_F=10A, di/dt=100A/\mu s$			50	ns
	$t_{rr2}$	$I_F=0.5A, I_R=1A$		16		ns
Thermal Resistance	$R_{th(j-c)}$	Junction-Case : Smoothed DC			3.22	$^{\circ}C/W$



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