



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

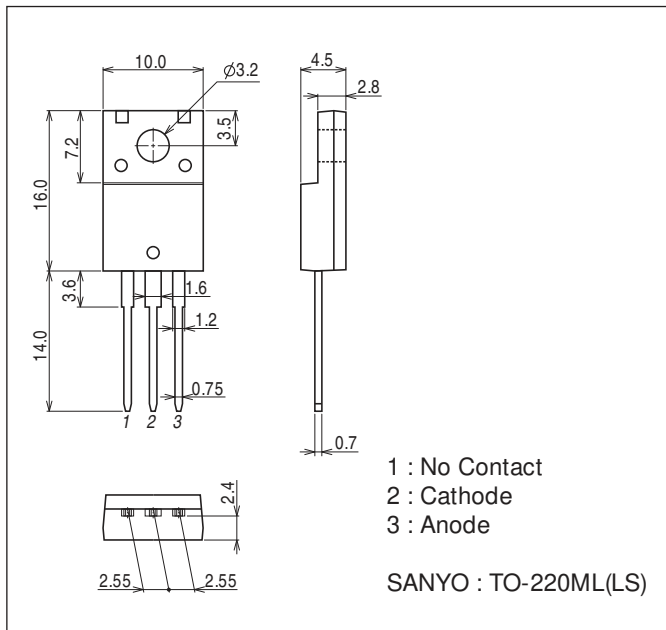
Absolute Maximum Ratings at $T_a=25^{\circ}C$

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)

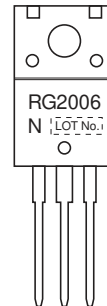
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Product & Package Information

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

Marking



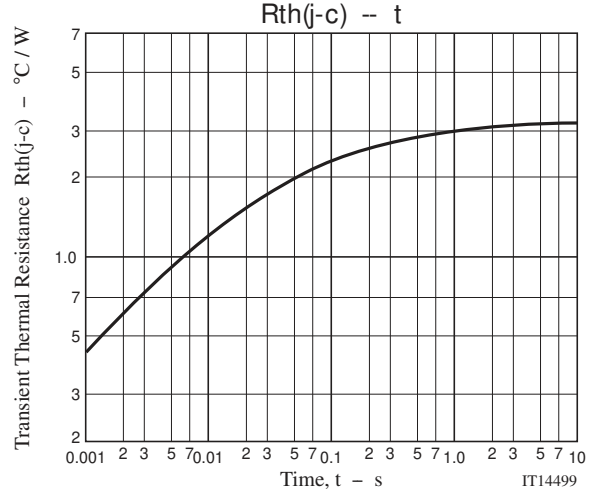
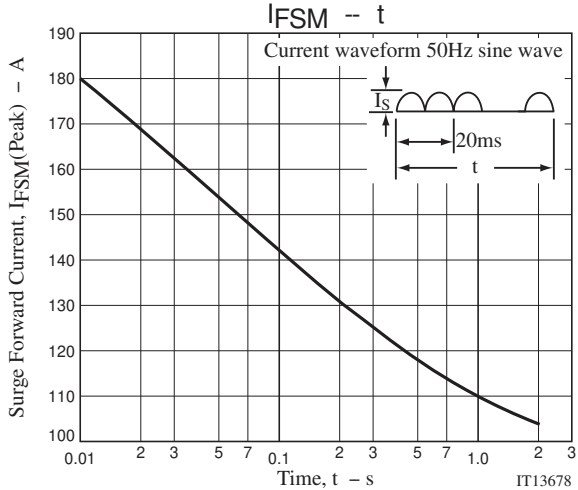
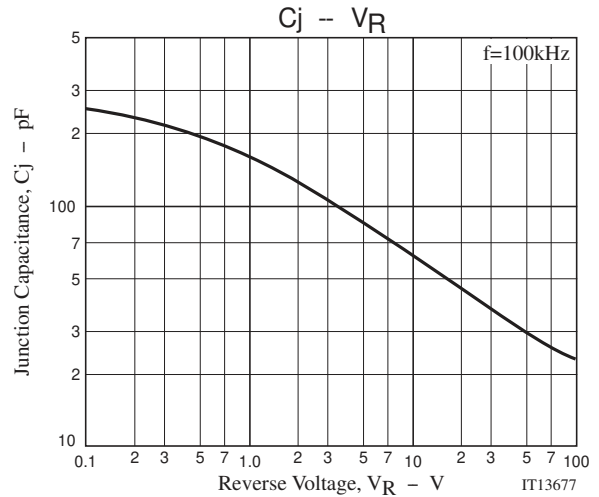
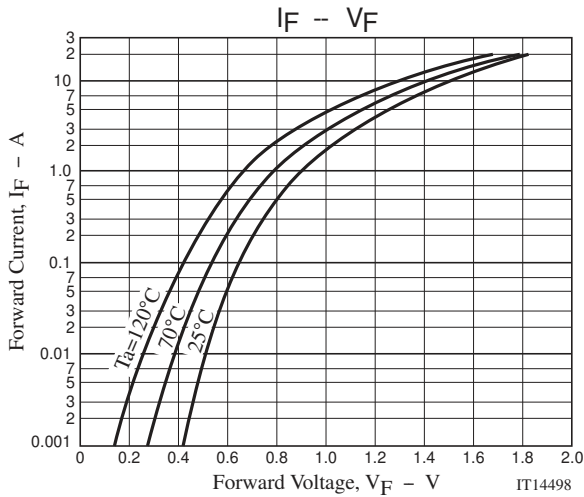
Electrical Connection



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	μA
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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