



RD2004LS

Diffused Junction Silicon Diode

Ultrahigh-Speed Switching Diode

Features

- High breakdown voltage ($V_{RRM}=400V$).
- 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 $T_a=25^{\circ}\text{C}$

Parameter	Symbol	Conditions	Ratings		Unit
Repetitive Peak Reverse Voltage	V_{RRM}			400	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}			400	V
Average Output Current	I_O			20	A
Peak Output Current	I_{OP}	$PW \leq 100\mu\text{s}$, duty $\leq 50\%$		80	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle		180	A
Junction Temperature	T_j			150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}			-55 to +150	$^{\circ}\text{C}$

Electrical Characteristics at $T_a=25^{\circ}\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=1\text{mA}$	400			V
Forward Voltage	V_F	$I_F=20\text{A}$			1.5	V
Reverse Current	I_R	$V_R=400\text{V}$			100	μA
Reverse Recovery Time	t_{rr}	$I_F=10\text{A}$, $dI/dt=100\text{A}/\mu\text{s}$			50	ns
Thermal Resistance	$R_{th(j-c)}$	Junction-Case : Smoothed DC			4.0	$^{\circ}\text{C} / \text{W}$

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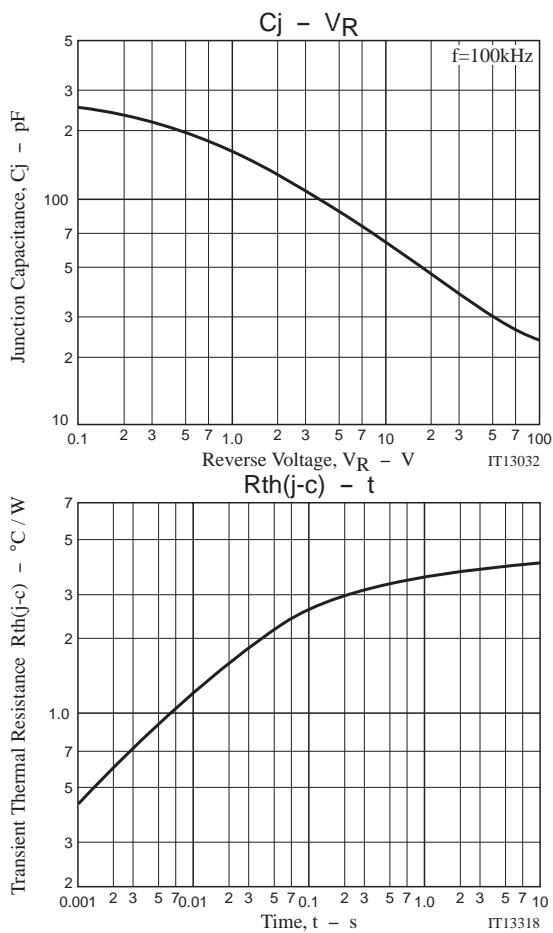
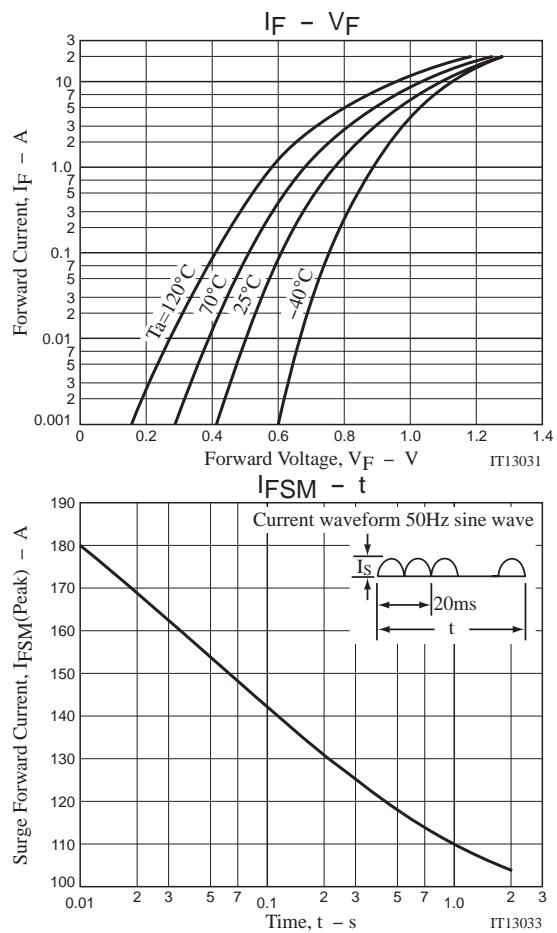
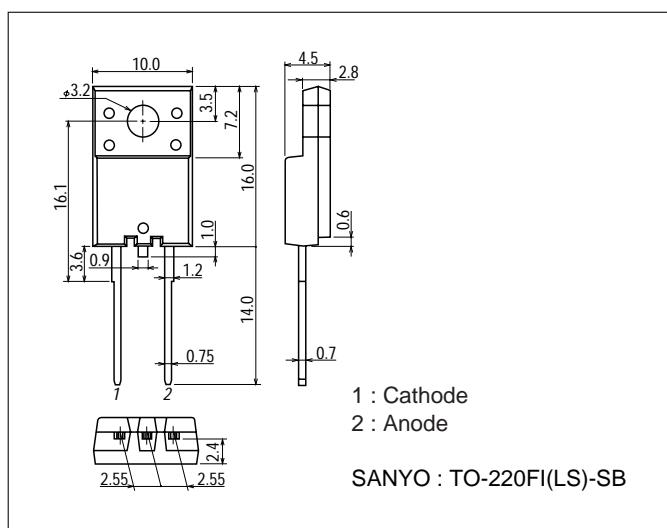
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22708SD TI IM TC-00001159 No. A0968-1/3

Package Dimensions

unit : mm (typ)

7510-001



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