



RD0504T Diffused Junction Silicon Diode

Low VF · High-Speed Switching Diode

Features

- $V_{RRM}=400V$
- $t_{rr}=17ns$ (typ.)($I_F=0.5A$, $I_R=1A$)
- $V_F \text{ max}=1.5V$
- Halogen free compliance

Specifications

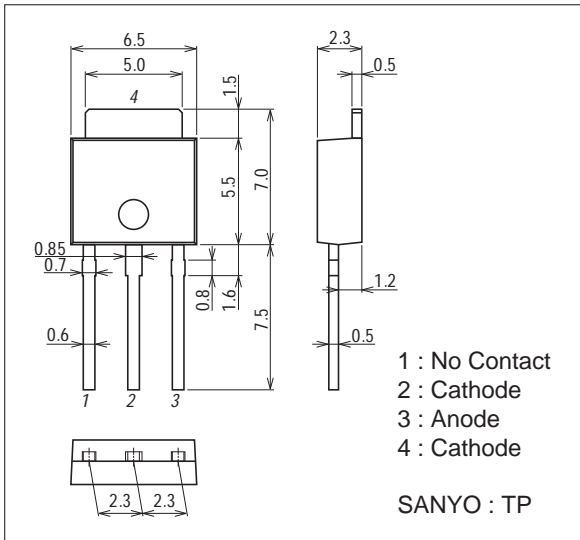
Absolute Maximum Ratings at $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		400	V
Average Output Current	I_O		5	A
Surge Forward Current	I_{FSM}	Sine wave 10ms, 1 cycle	40	A
Junction Temperature	T_j		150	$^\circ C$
Storage Temperature	T_{stg}		-55 to +150	$^\circ C$

Package Dimensions

unit : mm (typ)

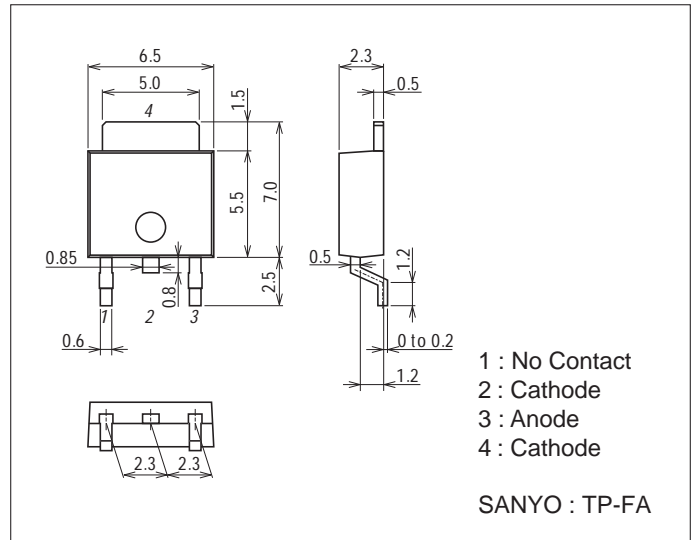
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Package Dimensions

unit : mm (typ)

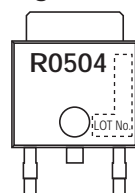
7003-001



Product & Package Information

- Package : TP
- JEITA, JEDEC : SC-64, TO-251, SOT553
- Minimum Packing Quantity : 500 pcs./bag

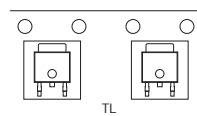
Marking(TP, TP-FA)



Product & Package Information

- Package : TP-FA
- JEITA, JEDEC : SC-63, TO-252, SOT428
- Minimum Packing Quantity : 700 pcs./reel

Packing Type(TP-FA) : TL



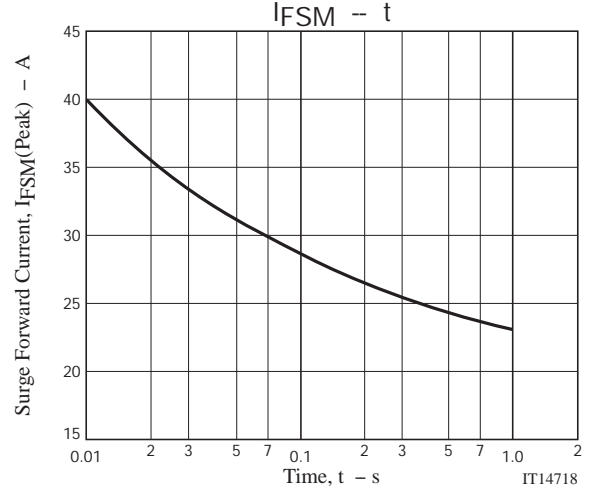
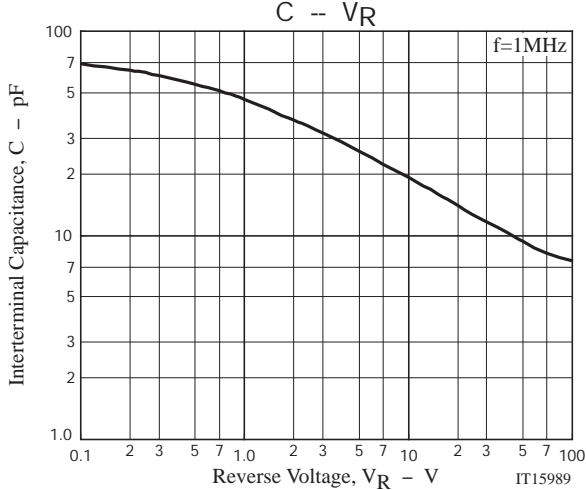
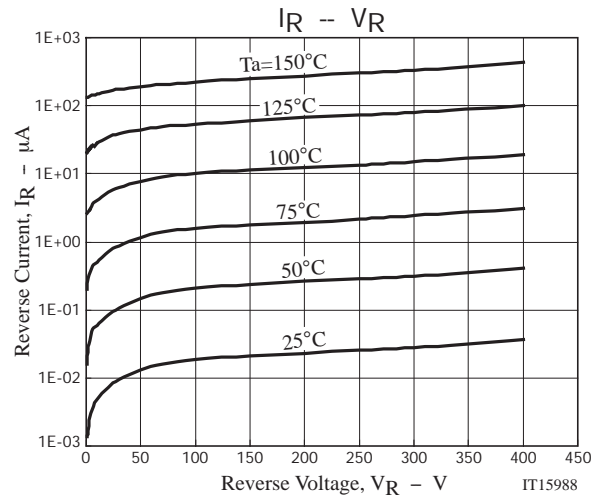
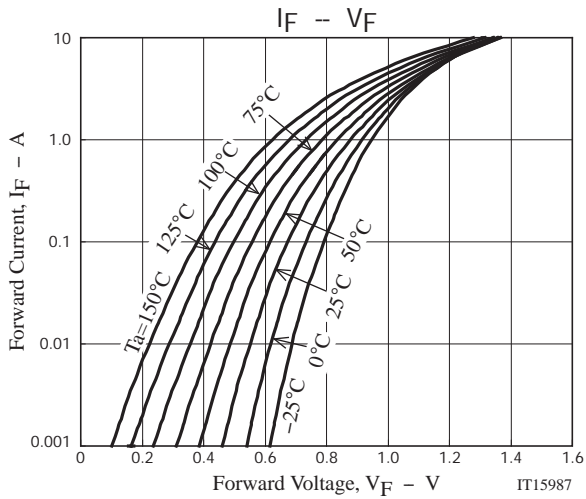
Electrical Connection



RD0504T

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=1\text{mA}$	400			V
Forward Voltage	V_F	$I_F=5\text{A}$		1.2	1.5	V
Reverse Current	I_R	$V_R=400\text{V}$			20	μA
Reverse Recovery Time	t_{rr1}	$I_F=5\text{A}, di/dt=100\text{A}/\mu\text{s}$		40	50	ns
	t_{rr2}	$I_F=0.5\text{A}, I_R=1\text{A}$		17		ns
Thermal Resistance	$R_{th(j-c)}$	Junction -Case		6		$^{\circ}\text{C} / \text{W}$



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