



SANYO Semiconductors

# DATA SHEET

## RD0504T — Diffused Junction Silicon Diode Low VF · High-Speed Switching Diode

### Features

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

### Specifications

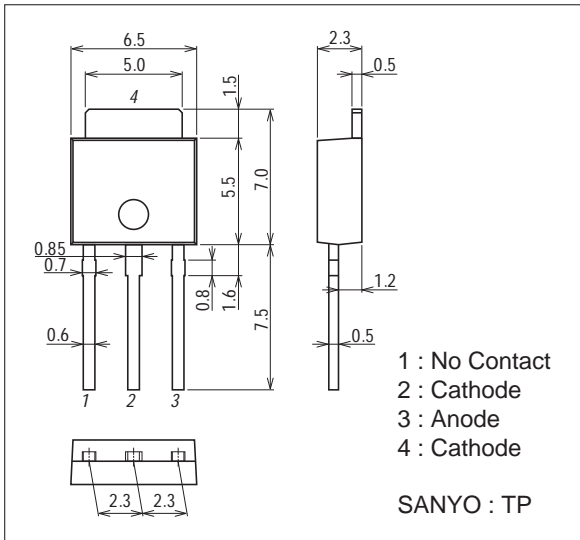
Absolute Maximum Ratings at  $T_a=25^\circ C$

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)

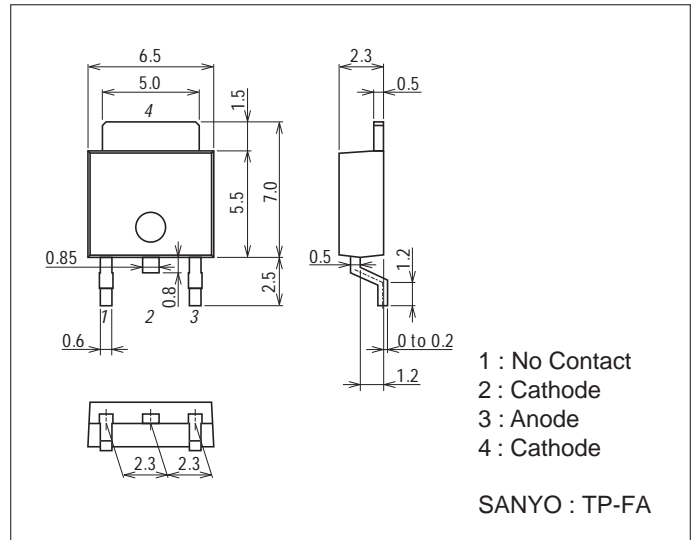
7518-002



### Package Dimensions

unit : mm (typ)

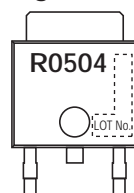
7003-001



### Product & Package Information

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

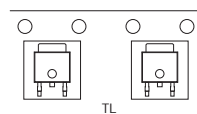
Marking(TP, TP-FA)



### Product & Package Information

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

Packing Type(TP-FA) : TL



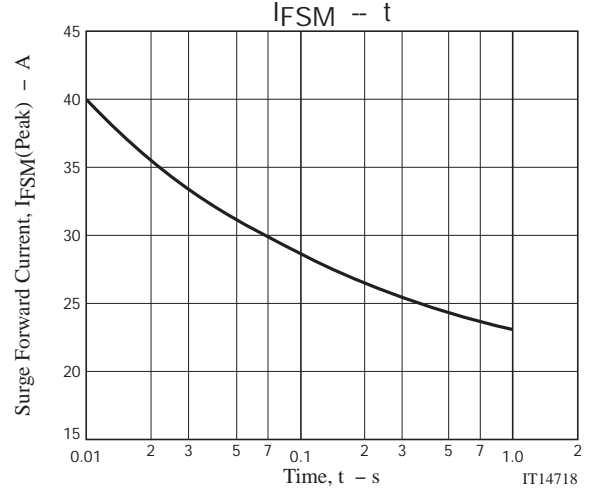
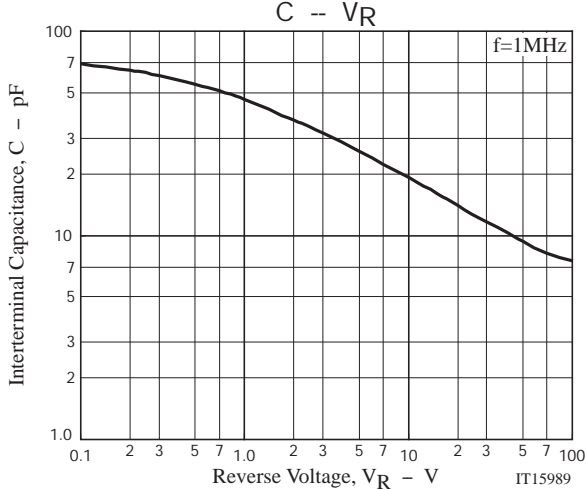
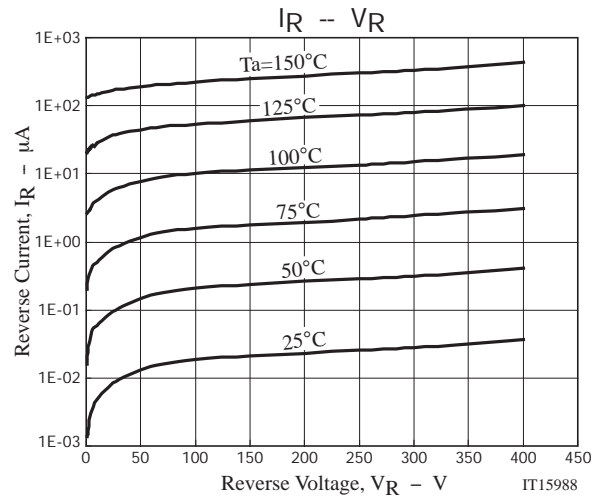
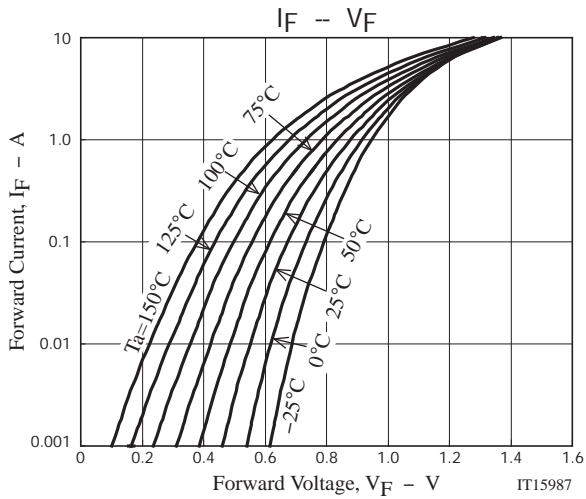
Electrical Connection



# RD0504T

## Electrical Characteristics at Ta=25°C

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



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