



# UD0506T — Diffused Junction Silicon Diode

## Low VF Switching Diode

### Features

- High breakdown voltage ( $V_{RRM}=600V$ ).
- Fast reverse recovery time.
- Low noise at the time of reverse recovery.
- Low forward voltage ( $V_F \text{ max}=1.3V$ ).
- Halogen free compliance.

### Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		600	V
Average Output Current	$I_O$		5	A
Surge Forward Current	$I_{FSM}$	Sine wave 10ms	40	A
Junction Temperature	$T_j$		150	$^\circ C$
Storage Temperature	$T_{stg}$		-55 to +150	$^\circ C$

Electrical Characteristics at  $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=1mA$	600			V
Forward Voltage	$V_F$	$I_F=5A$		1.1	1.3	V
Reverse Current	$I_R$	$V_R=600V$			10	$\mu A$
Reverse Recovery Time	$t_{rr1}$	$I_F=5A, di/dt=100A/\mu s$		120	150	ns
	$t_{rr2}$	$I_F=0.5A, I_R=1A$		53		ns
Thermal Resistance	$R_{th(j-c)}$	Junction -Case		6		$^\circ C / W$

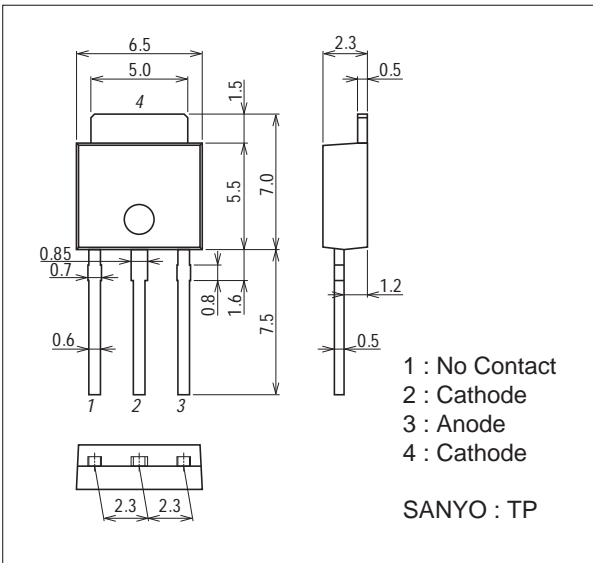
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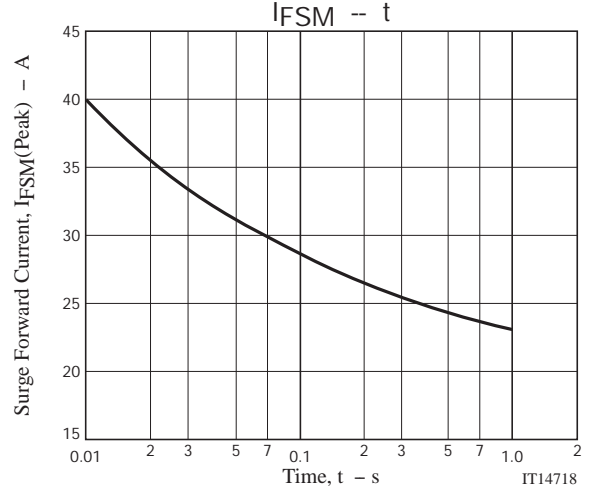
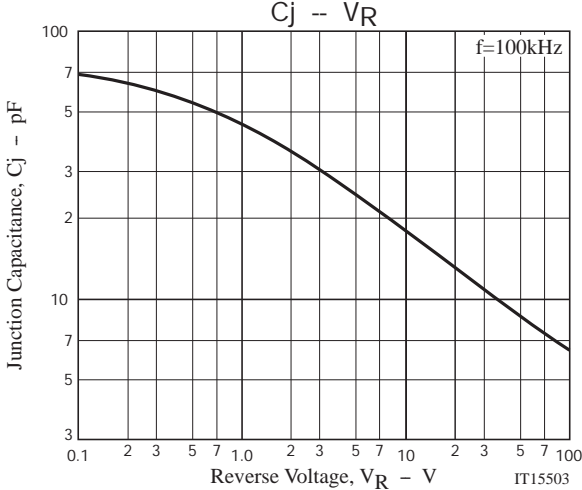
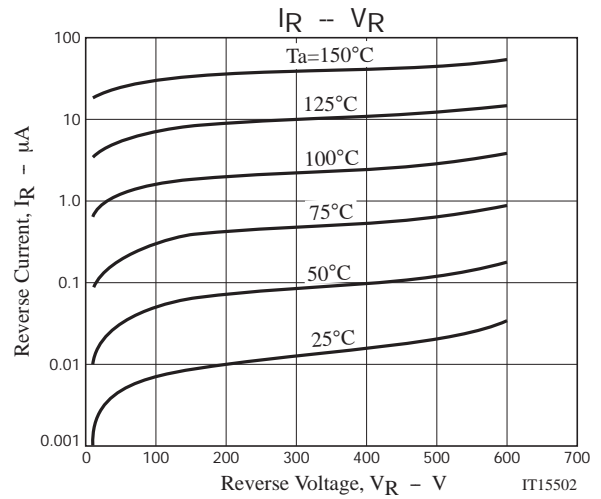
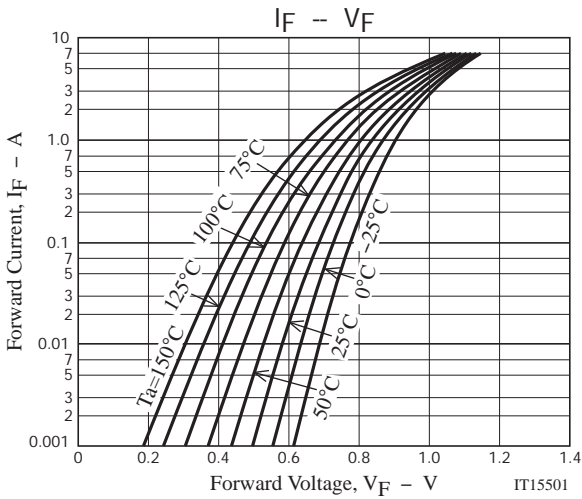
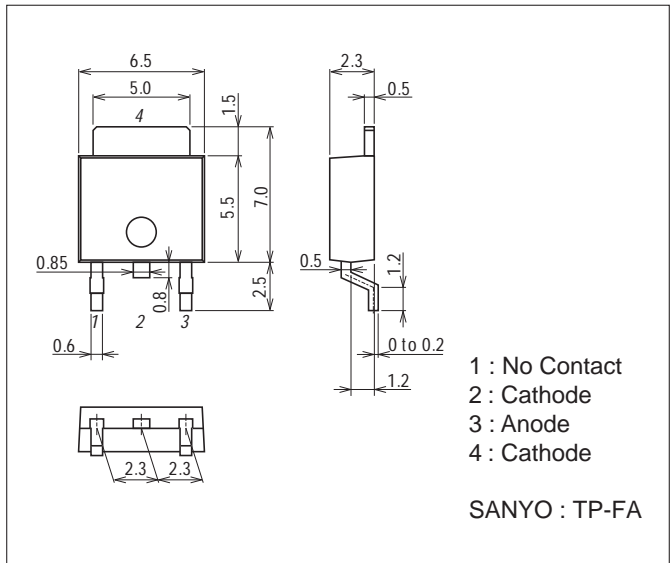
## Package Dimensions

unit : mm (typ)  
7518-002



## Package Dimensions

unit : mm (typ)  
7003-001



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