



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

UD1006LS-SB5 — Diffused Junction Silicon Diode Low VF Switching Diode

Features

- High breakdown voltage ($V_{RRM}=600V$).
- High reliability.
- One-point fixing type plastic molded package facilitating easy mounting and heat dissipation.
- Low V_F .
- 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}		600	V
Average Output Current	I_O		10	A
R.M.S Forward Current	$I_F(RMS)$		18	A
Surge Forward Current	I_{FSM}	Sine wave 10ms 1pulse	120	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	$I_F=10A$		1.15	1.3	V
Reverse Current	I_R	$V_R=600V$			20	μA
Reverse Recovery Time	t_{rr1}	$I_F=10A, di/dt=100A/\mu s$		100	150	ns
	t_{rr2}	$I_F=0.5A, I_R=1A$		60		ns
Thermal Resistance	$R_{th(j-c)}$	Junction -Case : Smoothed DC			4.9	$^\circ C/W$

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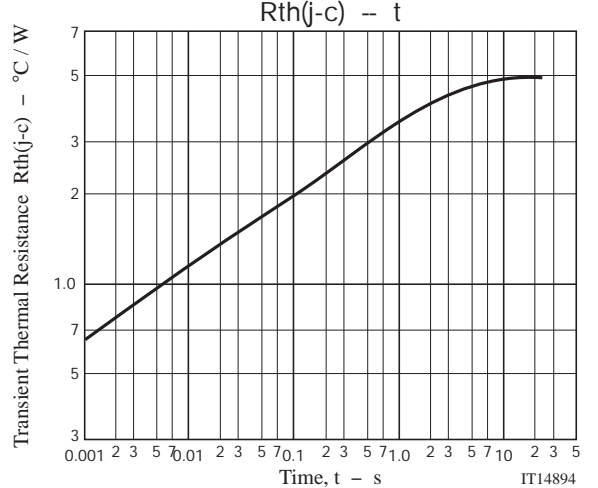
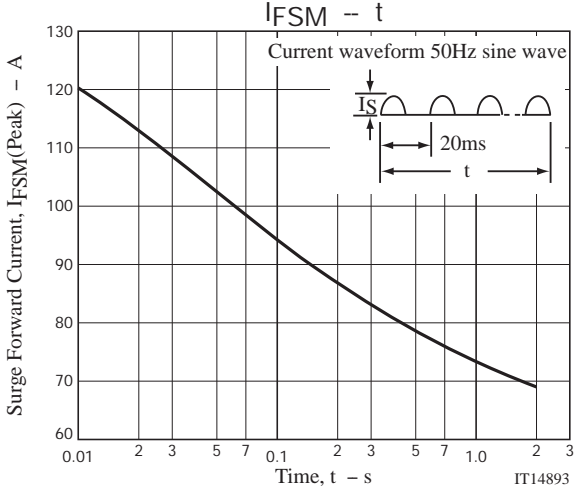
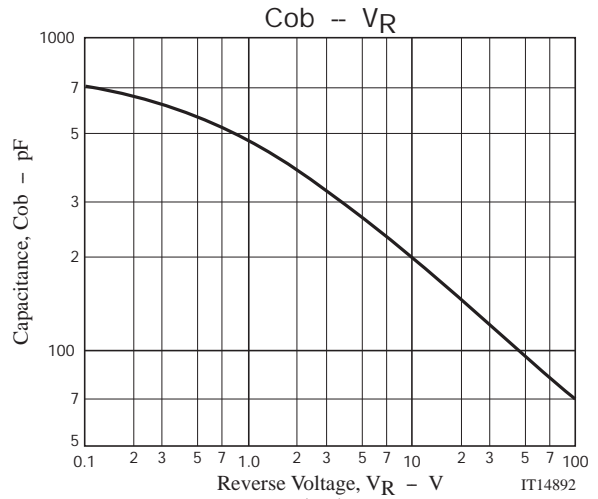
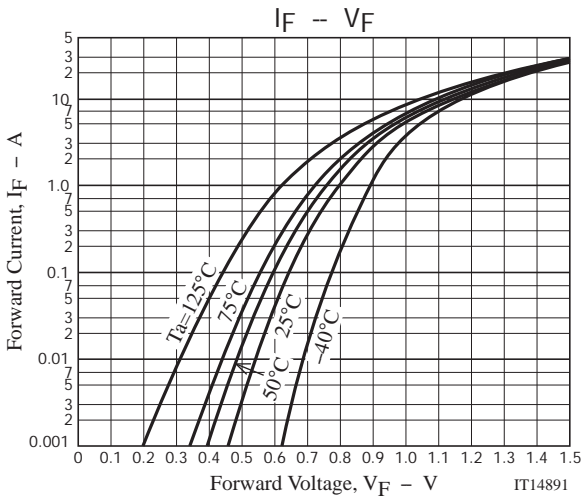
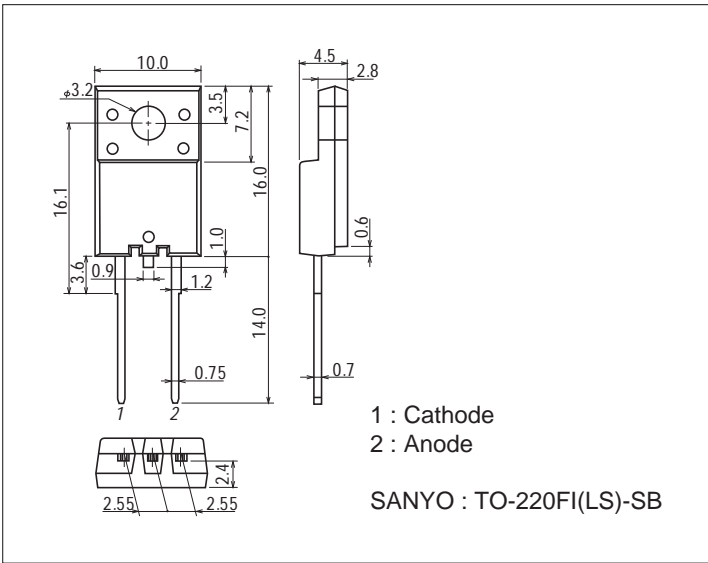
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Package Dimensions

unit : mm (typ)

7510-001



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