

# SANYO Semiconductors DATA SHEET

## UD1006FR —

Diffused Junction Silicon Diode

### Low VF Switching Diode

#### **Features**

- · VRRM=600V.
- $t_{rr}=60ns(typ)$  (IF=0.5A, IR=1A).
- V<sub>F</sub>=1.3V max (I<sub>F</sub>=10A).
- · Halogen free compliance

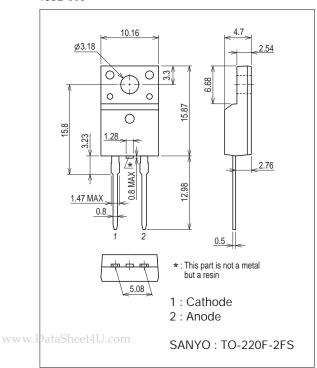
#### **Specifications**

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		600	V
Nonrepetitive Peak Reverse Surge Voltage	V <sub>RSM</sub>		600	V
Average Output Current	lo	50Hz resistive load, Sine wave Tc=79°C	10	А
R.M.S Forward Current	I <sub>F</sub> (RMS)	Tc=25°C (SANYO's ideal heat dissipation condition) Package limited	18	А
Surge Forward Current	I <sub>FSM</sub>	Sine wave 10ms 1pulse	120	А
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

#### **Package Dimensions**

unit : mm (typ) 7532-001



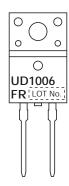
#### **Product & Package Information**

• Package : TO-220F-2FS

• JEITA, JEDEC : SC-67

• Minimum Packing Quantity : 50pcs./magazine

#### Marking



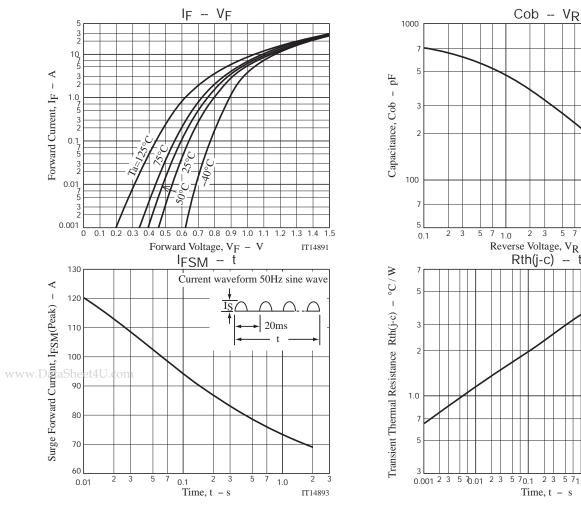
#### **Electrical Connection**

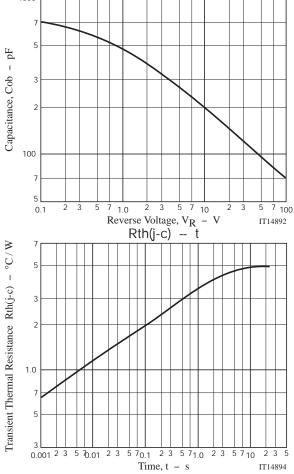


#### UD1006FR

#### Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Ullit
Reverse Voltage	VR	I <sub>R</sub> =1mA	600			V
Forward Voltage	VF	I <sub>F</sub> =10A		1.1	1.3	V
Reverse Current	IR	V <sub>R</sub> =600V			100	μΑ
Reverse Recovery Time	t <sub>rr</sub> 1	I <sub>F</sub> =10A, di / dt=100A/μs		100	150	ns
	t <sub>rr</sub> 2	IF=0.5A, IR=1A		60		ns
Thermal Resistance	Rth(j-c)	Junction -Case : Smoothed DC	·		4.9	°C / W





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