Ordering number : ENA1745A

UD1006FR

Planar Ultrafast Rectifier
Low VF type, 10A, 600V, 1.3V, TO-220F-2FS

ON Semiconductor®
http://onsemi.com

Features

- V_{RRM}=600V
- t_{rr}=60ns(typ) (I_F=0.5A, I_R=1A)
- V_F=1.3V max (I_F=10A)
- Halogen free compliance

Specifications

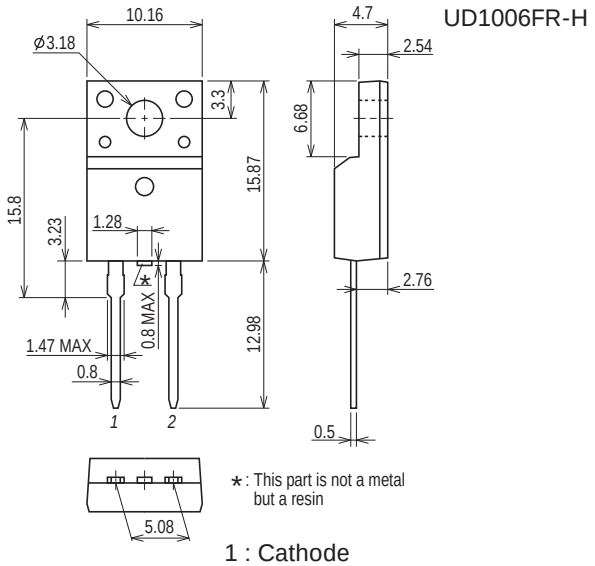
Absolute Maximum Ratings at Ta=25°C

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	50Hz resistive load, Sine wave Tc=79°C	10	A
R.M.S Forward Current	I_F(RMS)	Tc=25°C (SANYO's ideal heat dissipation condition) Package limited	18	A
Surge Forward Current	I_{FSM}	Sine wave 10ms 1pulse	120	A
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		−55 to +150	°C

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

Package Dimensions

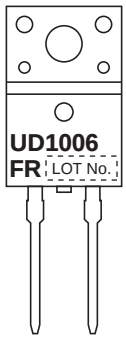
unit : mm (typ)
7532-001



Product & Package Information

- Package : TO-220F-2FS
- JEITA, JEDEC : SC-67
- Minimum Packing Quantity : 50pcs./magazine

Marking



Electrical Connection

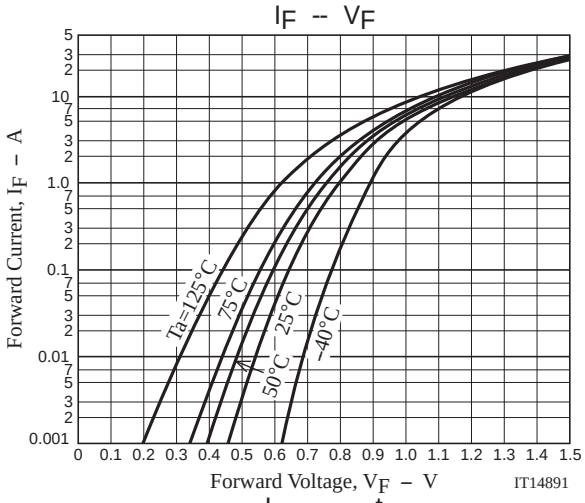


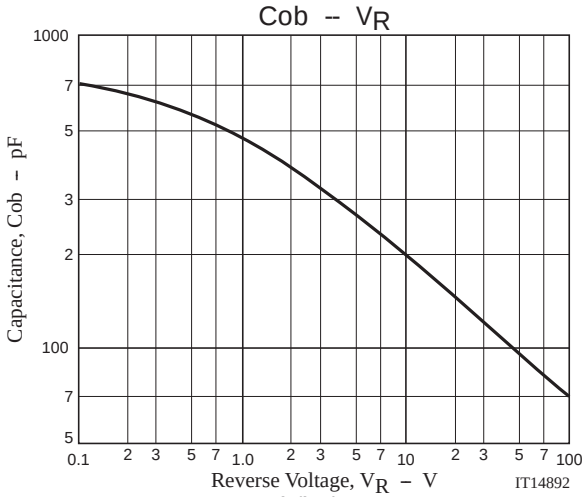
Electrical Characteristics at Ta=25°C

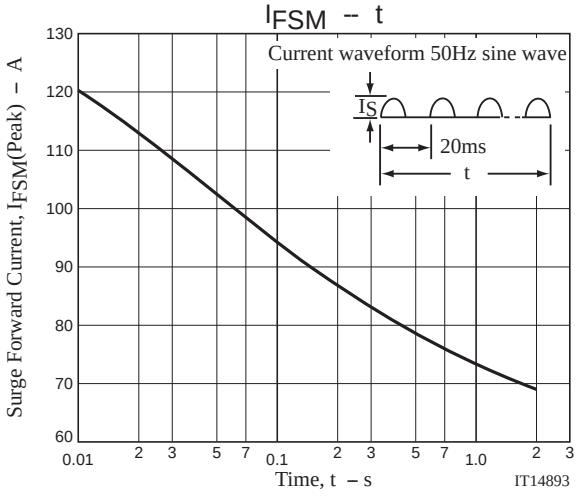
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	I_R=1mA	600			V
Forward Voltage	V_F	I_F=10A		1.1	1.3	V
Reverse Current	I_R	V_R=600V			100	μA
Reverse Recovery Time	$t_{rr}1$	I_F=10A, di / dt=100A/μs		100	150	ns
	$t_{rr}2$	I_F=0.5A, I_R=1A		60		ns
Thermal Resistance	Rth(j-c)	Junction -Case : Smoothed DC			4.9	°C / W

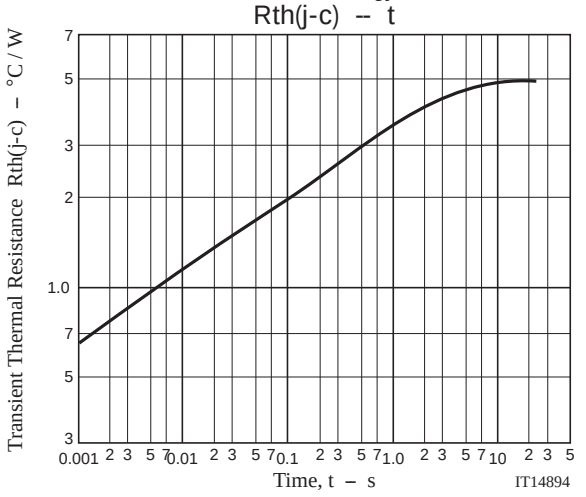
Ordering Information

Device	Package	Shipping	memo
UD1006FR-H	TO-220F-2FS	50pcs./magazine	Pb Free and Halogen Free









Magazine Specification

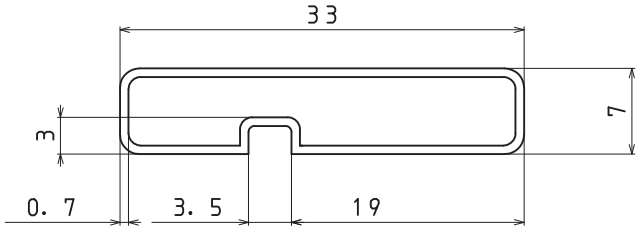
UD1006FR-H

1. Packing Format

Package Name	Magazine Name	Maximum Number of devices contained (pcs)			Packing format	
		Magazine	Inner box	Outer box	Inner BOX	Outer BOX
TO-220F-2FS	TO-220F	50	1,000	4,000	SPD-0V0001 20 magazines contained Dimensions:mm (external) 568×150×55	SPT-081029 4 inner boxes contained Dimensions:mm (external) 590×225×178

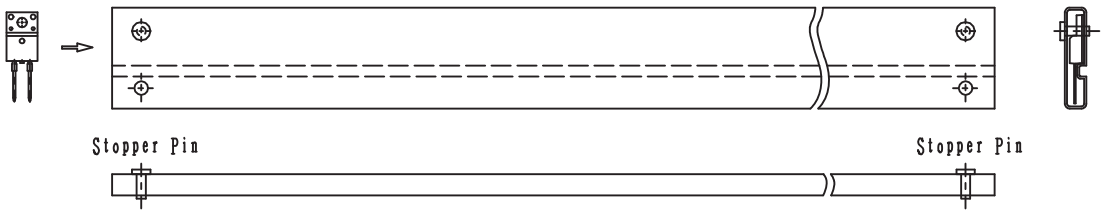
2. Magazine dimensions

(unit:mm)

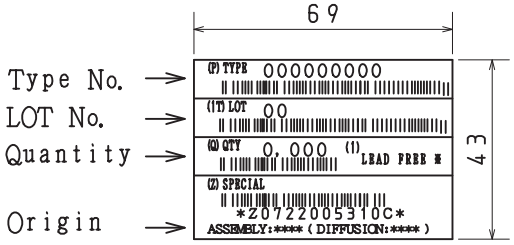


Tolerance=±0.3mm
Thickness=0.7±0.2mm
Length =532.5±2mm
Material =PVC (Antistatic treatment)

3. Storage method to magazine

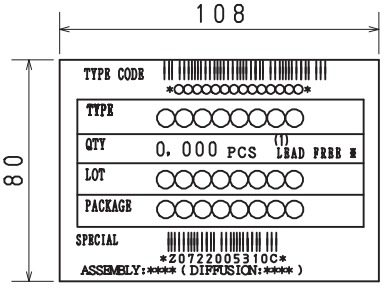


4. Inner box label (unit:mm)



5. Outer box label (unit:mm)

It is a label at the time of factory shipments.
The form of a label may change in physical distribution process.



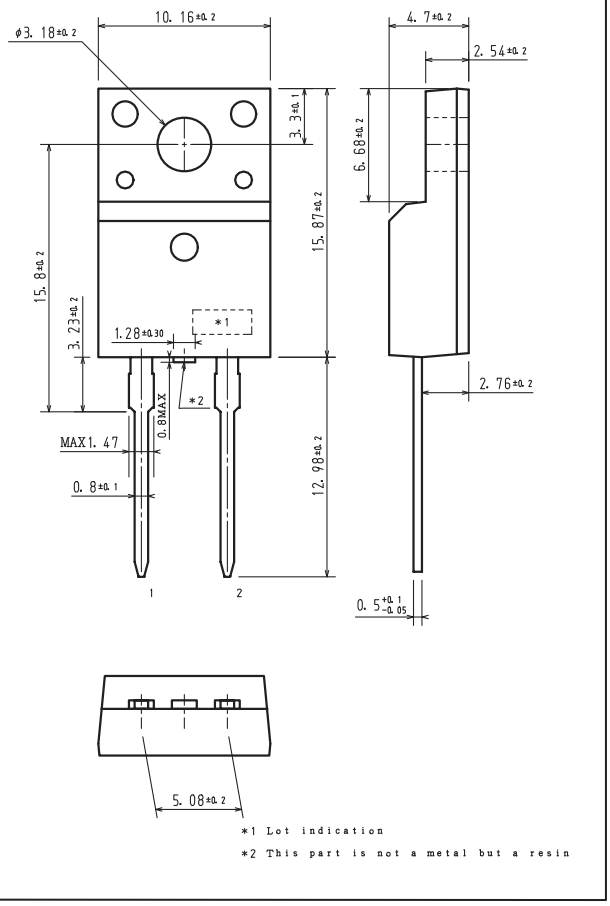
NOTE (1)
The LEAD FREE ※ description shows that the surface treatment of the terminal is lead free.

Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A

Outline Drawing

UD1006FR-H

Mass (g)	Unit
1.8 * For reference	mm



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