Ordering number : ENA1845A

UD2006FR

Planar Ultrafast Rectifier
Low VF type, 20A, 600V, 1.4V, TO-220F-2FS

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http://onsemi.com

Features

- V_F=1.4V max. (I_F=20A)
- V_{RRM}=600V
- t_{rr}=60ns (typ.)

Specifications

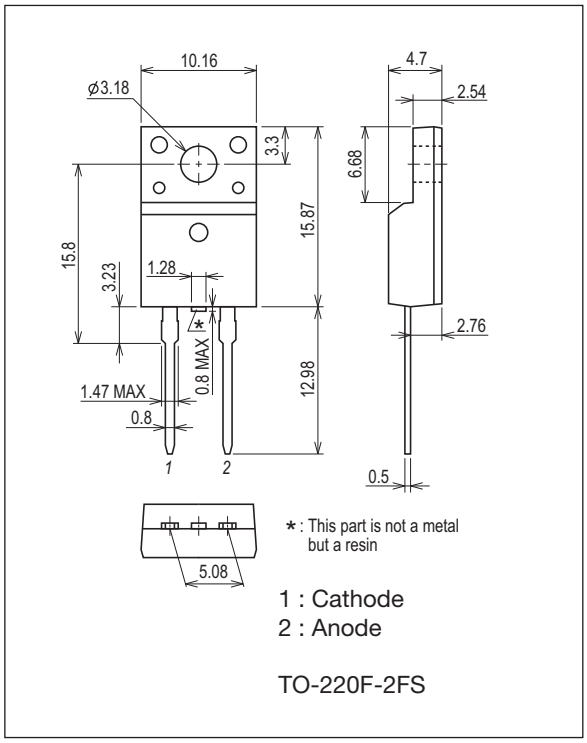
Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	DC bias	600	V
Average Output Current	I_O	50Hz resistive load, Sine wave Tc=32°C	20	A
R.M.S Forward Current	I_F(RMS)	Tc=25°C (SANYO's ideal heat dissipation condition) Package limited, DC	24	A
Surge Forward Current	I_{FSM}	50Hz sine wave 1pulse	180	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

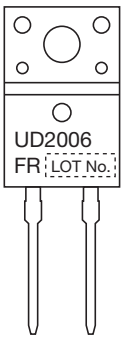
unit : mm (typ)
7532-001



Product & Package Information

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

Marking



Electrical Connection

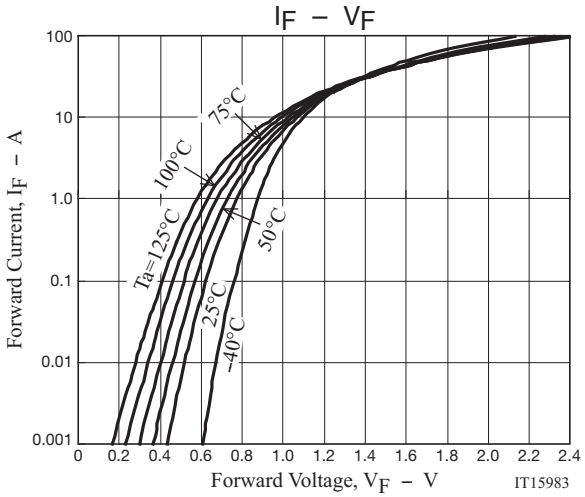


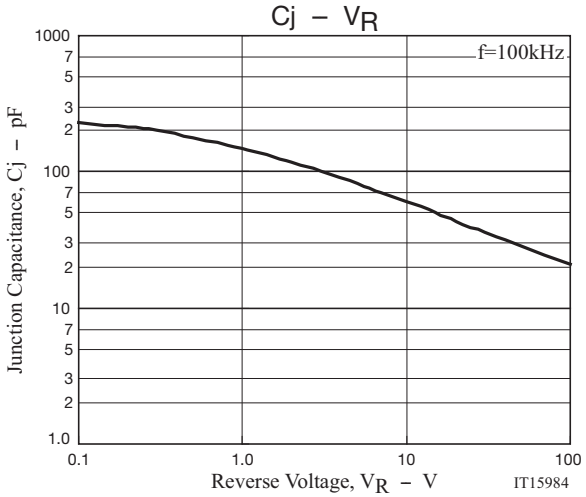
Electrical Characteristics at Ta=25°C

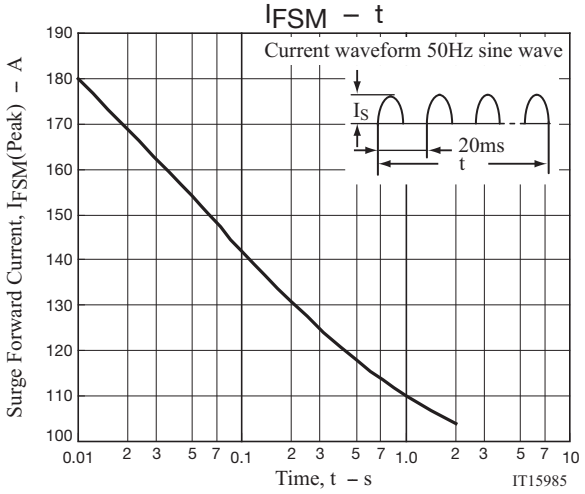
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	I_R=1mA	600			V
Forward Voltage	V_F	I_F=20A		1.2	1.4	V
Reverse Current	I_R	V_R=600V			20	μA
Reverse Recovery Time	$t_{rr}1$	I_F=10A, di / dt=100A/μs		75	150	ns
	$t_{rr}2$	I_F=0.5A, I_R=1A		60		ns
Thermal Resistance	Rth(j-c)	Junction -Case : Smoothed DC			4	°C / W

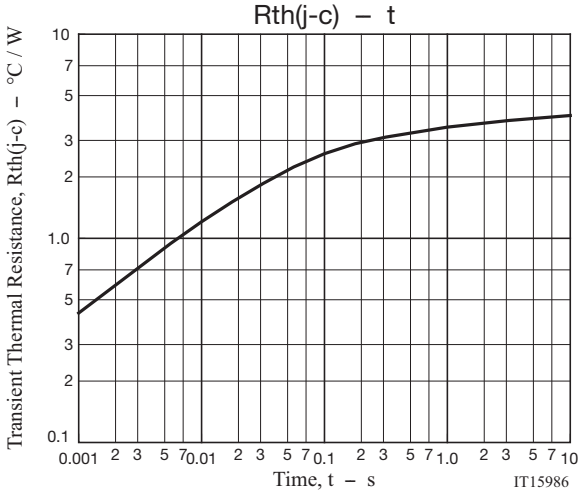
Electrical Characteristics at Ta=125°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Current	I_R	V_R=600V			200	μA









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