semiconductors :: product :: Ultrafast Recovery Rectifiers

### **Product: Ultrafast Recovery Rectifiers**

FAGOR ELECTRONICA's Ultrafast Recovery Rectifiers offer reverse recovery times down to 30ns using broad range of forward current possibilities and packages.

Ideal for high frequency applications like SMPS, Monitors, Electronic Ballast, Inverters....

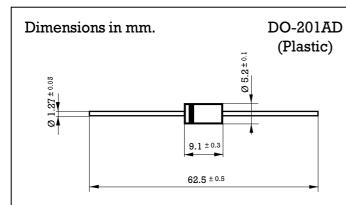
 $\label{thm:manufactured} \mbox{ Manufactured using HYPERECTIFIER} @ \mbox{ technology, we offer these devices housed either in leaded packages or SMD.}$ 

Product	Family	$I_{F(AV)}(A)$	$I_{FSM}(A)$	$V_{RRM}(V)$	$V_F(V)$	T <sub>RR</sub> (ns)	OUTLINE
FUF5408	FUF5400	3.0	150	1000	1.7	75	DO201-AD





# 3 Amp. Glass Passivated Ultrafast Recovery Rectifier



# Voltage Current 50 to 1000 V. 3 A at 55 °C.

### Mounting instructions

- l. Min. distance from body to soldering point,  $4\ \mathrm{mm}$ .
- 2. Max. solder temperature, 350 °C.
- 3. Max. soldering time, 3.5 sec.
- 4. Do not bend lead at a point closer than 3 mm. to the body.

### • Glass Passivated Junction

- High current capability
- The plastic material carries U/L recognition 94 V-0
- Terminals: Axial Leads
- Polarity: Color band denotes cathode

## Maximum Ratings, according to IEC publication No. 134

		FUF 5400	FUF 5401	FUF 5402	FUF 5404	FUF 5406	FUF 5407	FUF 5408	
$V_{RRM}$	Peak Recurrent reverse voltage (V)	50	100	200	400	600	800	1000	
V <sub>RMS</sub>	Maximum RMS voltage	35	70	140	280	420	560	700	
V <sub>DC</sub>	Maximum DC blocking voltage	50	100	200	400	600	800	1000	
$I_{F(AV)}$	Forward current at Tamb = 55 °C	3 A							
$I_{FRM}$	Recurrent peak forward surge current	30 A							
$I_{\text{FSM}}$	8.3 ms. peak forward surge current (Jedec Method)	150 A							
$t_{rr}$	Max. reverse recovery time from $I_F = 0.5 \text{ A}$ ; $I_R = 1 \text{ A}$ ; $I_{RR} = 0.25 \text{ A}$	Ę		50 ns			75 ns		
$C_{j}$	Typical Junction Capacitance at 1 MHz and reverse voltaje of $4V_{\tiny DC}$	45 pF							
$T_{j}$	Operating temperature range	− 65 to + 150 °C							
$T_{ m stg}$	Storage temperature range	− 65 to + 150 °C							
E <sub>RSM</sub>	Maximum non repetitive peak reverse avalanche energy. $I_R = 1 \text{A}$ ; $T_J = 25  ^{\circ}\text{C}$	20 mJ							

### Electrical Characteristics at Tamb = 25 °C

$V_{\rm F}$	Max. forward voltage drop at $I_F = 3 \text{ A}$	1.3 V	1.7 V		
$I_{\scriptscriptstyle  m R}$	Max. reverse current at $V_{\text{RRM}}$ at 25 °C	5 µ A			
R <sub>thj-a</sub>	Max. thermal resistance ( l = 10 mm.)	30 °C/W			