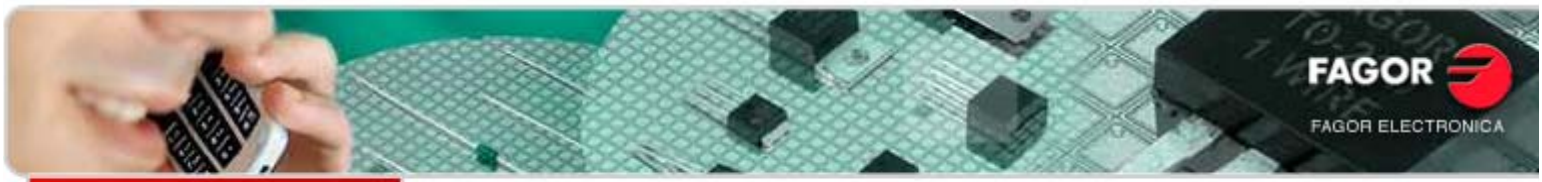


Product: Fast Recovery Rectifiers

Fast Recovery Rectifiers are devices used in applications where commutation times around 150 ÷ 500ns are required. Switching Power Supplies, Electronic Ballast, Small Household Appliances are some of the typical end uses.

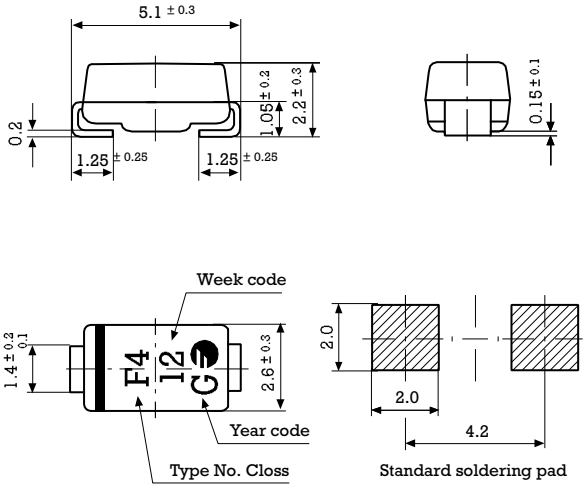
Manufactured using HYPERECTIFIER© Glass Passivated technology, we offer these devices housed either in leaded packages or SMD.

Product	Family	$I_{F(AV)}$(A)	I_{FSM}(A)	V_{RRM}(V)	V_F(V)	T_{RR}(ns)	OUTLINE
FRS1M	FRS1	1.0	30	1000	1.3	300	DO214AC/SMA

1 Amp. Surface Mounted Glass Passivated Fast Recovery Rectifier

Dimensions in mm.

CASE:
SMA/DO-214AC



Voltage
50 to 1000 V

Current
1.0 A

HYPERECTIFIER®

- **Glass passivated junction**
- High current capability
- The plastic material carries U/L 94 V-0
- Low profile package
- Easy pick and place
- High temperature soldering 260 °C 10 sec

MECHANICAL DATA

Terminals: Solder plated, solderable per IEC 68-2-20.
Standard Packaging: 4 mm. tape (EIA-RS-481).
Weight: 0.064 g.

Maximum Ratings and Electrical Characteristics at 25 °C

		FRS1A	FRS1B	FRS1D	FRS1G	FRS1J	FRS1K	FRS1M
Marking Code		F1	F2	F3	F4	F5	F6	F7
V_{RRM}	Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000
V_{RMS}	Maximum RMS Voltage	35	70	140	280	420	560	700
V_{DC}	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000
$I_{F(AV)}$	Forward current at T_L = 110 °C	1.0 A						
I_{FSM}	8.3 ms. peak forward surge current (Jedec Method)	30 A						
V_F	Maximum Instantaneous Forward Voltage at 1.0A	1.3 V						
I_R	Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 125 °C	5µ A 50µ A						
t_{rr}	Maximum Reverse Recovery Time (0.5/1/0.25A)	150 ns				250 ns	500 ns	
C_j	Typical Junction Capacitance (1MHz; -4V)	8 pF						
$R_{th\ (j-l)}$ $R_{th\ (j-a)}$	Typical Thermal Resistance (5x5 mm² x 130 µ Copper Area)	27 °C/W 75 °C/W						
T_j - T_{stg}	Operating Junction and Storage Temperature Range	-55 to + 150 °C						