

# BRUSHLESS DC FANS

# F251RF

## FEATURES

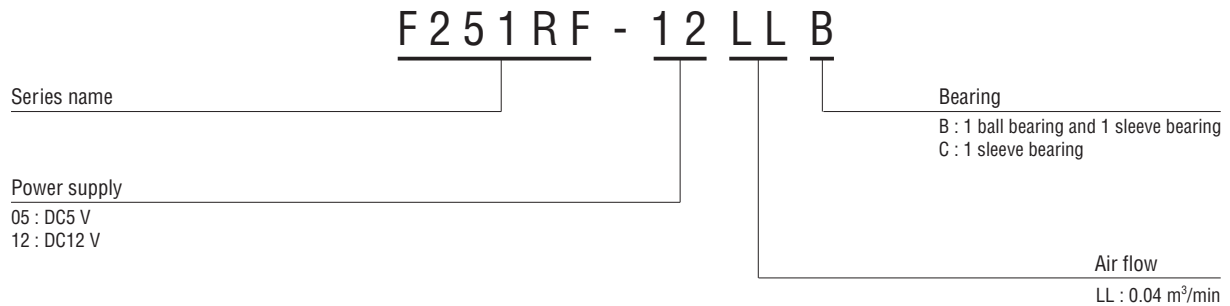
- FG signal type
- Low noise, 11 dB (A) type by the correct application of hydrodynamic design of impeller and frame
- Light weight (approx. 7 g)

## STRUCTURE

- Frame and impeller  
ABS/PBT alloy
- Bearing  
B type : 1 ball bearing and 1 sleeve bearing  
C type : 1 sleeve bearing



## PART NUMBER DESIGNATION



## LIST OF PART NUMBERS

Power supply	Part number
DC5 V	F251RF-05LLB
DC12 V	F251RF-12LLB
	F251RF-12LLC

\* : Verify the above part numbers when placing orders.

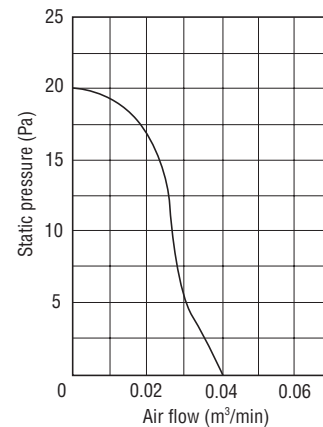
## F251RF BRUSHLESS DC FANS

### STANDARD SPECIFICATIONS

Item	F251RF-05LLB	F251RF-12LLB	F251RF-12LLC
Rated voltage	DC5 V	DC12 V	DC12 V
Voltage range	4.2 ~ 5.7 V	10.2 ~ 13.8 V	
Rated current	0.05 A	0.03 A	
Rotating speed	6500 min <sup>-1</sup>		
Air flow	0.04 m <sup>3</sup> /min		
Static pressure	20 Pa		
Noise	11 dB (A)		
Net weight	Approx. 7 g		

\* : Figures in the table are typical values under rated operating condition.

### AIR FLOW PERFORMANCE CURVES



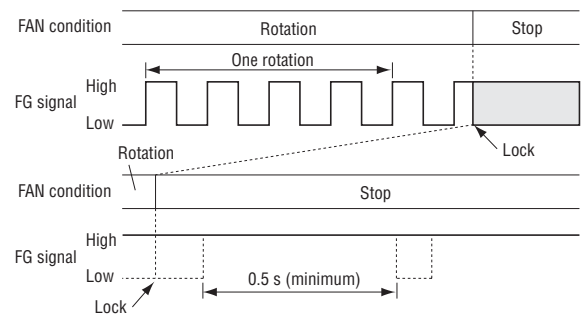
### FG SIGNAL CHARACTERISTICS

Item	Specification
Output circuit	Open collector
Maximum output voltage	15 V
Maximum sink current	5 mA
Output saturation voltage (at Low)	V <sub>sat</sub> : Maximum 0.4 V
Output (rotate)	4 pulses / rotation
Output (lock)	High or High/Low intermittent motion *
Time a High Signal (lock)	0.5 s minimum

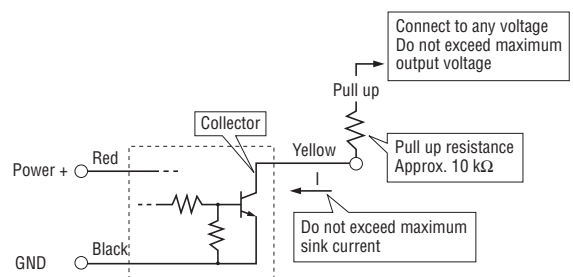
\* : 2 conditions are possible according to the stop position of the impeller.

- ① "High" (Fixed) : Constantly "High"
- ② "High/Low" intermittent motion : "High" and "Low" switch at regular time intervals.  
It is guaranteed that "high" continues over 0.5 seconds.

### FAN condition and FG signal

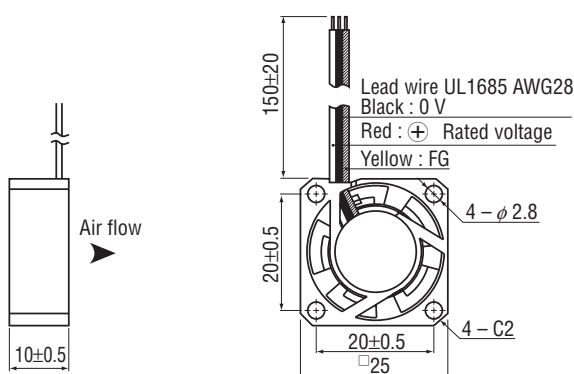


### Output circuitry



### OUTLINE DIMENSIONS

(Unit: mm)



Dimension of mounting hole for recommendation

