

# **SF1A600H**

**Ultra Fast Recovery Diode** 

## **Applications**

- High speed switching and rectification
- Switching mode power supply

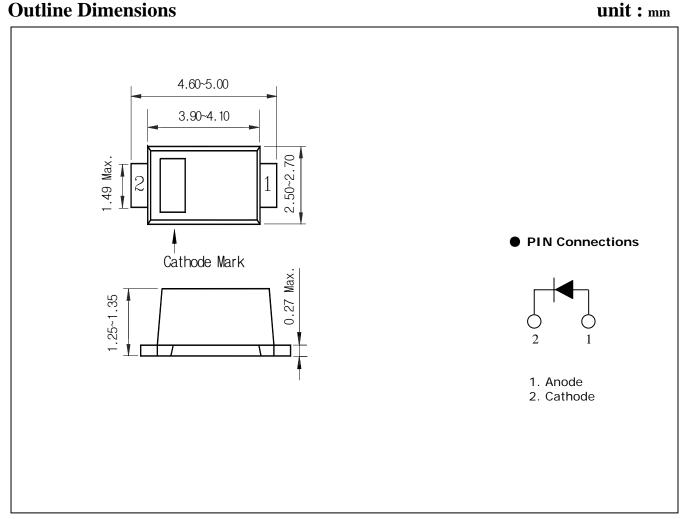
#### **Features**

- Ultra-fast reverse recovery time: trr=35ns Max.
- Small & compact type SMD package
- Low reverse current & low switching loss

# **Ordering Information**

Type No. Marking		Package Code	
SF1A600H	1A6H	SOD-106	

## **Outline Dimensions**



KSD-D6A006-000

**Absolute Maximum Ratings** 

[Ta=25°C]

Characteristic	Symbol	Rating	Unit
Repetitive peak reverse voltage	$V_{RRM}$	600	V
Average rectified output current	Io	1.0	А
Peak forward surge current (Non-repetitive 60Hz sine wave)	I <sub>FSM</sub>	20	А
Junction temperature	TJ	150	°C
Storage temperature range	T <sub>stg</sub>	-45 ~ 150	°C

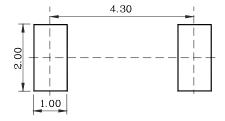
# **Electrical Characteristics**

[Ta=25°C]

Characteristic	Symbol	Test Condition	Min.	Тур.	Max.	Unit
Peak forward voltage	V <sub>FM</sub> <sup>1)</sup>	I <sub>F</sub> =1A	-	1.45	1.7	V
Repetitive peak reverse current	I <sub>RRM</sub>	V <sub>R</sub> =600V	-	-	10	μA
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> =0.5A, di/dt=-100A/μs	-	23	35	ns
Thermal resistance	$R_{th}$	Junction to ambient 2)	-	-	76	°C/W

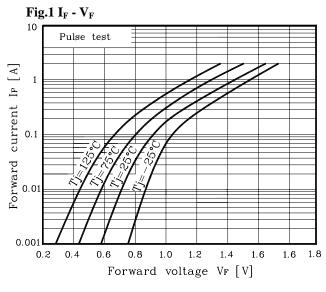
<sup>1)</sup> Pulse test :  $t_P \le 380 \,\mu\text{s}$ , Duty cycle  $\le 2\%$ 

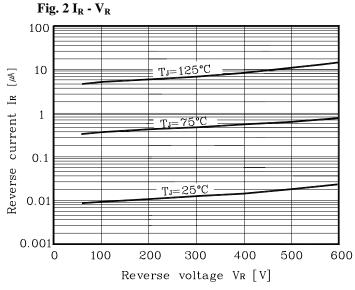
#### \* Recommend PCB solder land [Unit : mm]

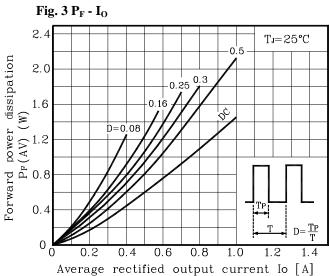


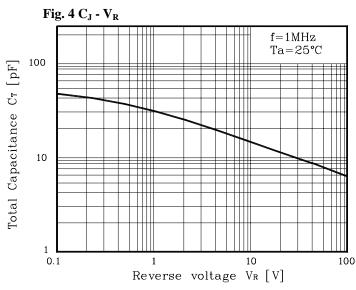
<sup>2)</sup> Device mounted on glass epoxy PCB (recommanderable minimum solder land)

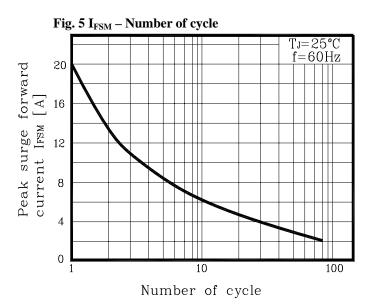
### **Electrical Characteristic Curves**

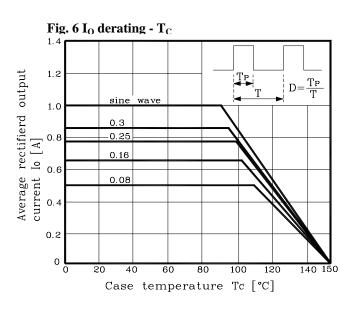












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