

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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### 1 Scope

The present specifications shall apply to Sanken silicon diode FMG-24S/R.

#### 2 Outline

Туре	Silicon Diode		
Structure	Resin Molded		
Applications	High Frequency Rectification		

### 3 Flammability

UL94V-0(Equivalent)

#### 4 Absolute maximum ratings

No.	Item	Symbol	Unit	Rating	Conditions
1	1 Transient Peak Reverse Voltage		V	400	
2	Peak Reverse Voltage	$V_{RM}$	V	400	
3	Average Forward Current	I <sub>F(AV)</sub>	A	8	Tc ≤ 80°C Sinewave
4	Peak Surge Forward Current	$I_{FSM}$	A	65	10 ms. Half sine wave, one
5	I <sup>2</sup> t Limiting Value	$I^2t$	$A^2s$	21.1	$1 \text{ ms} \le t \le 10 \text{ ms}$
6	Junction Temperature	$T_{j}$	°C	-40 to +150	
7	Storage Temperature	$T_{stg}$	°C	-40 to +150	

No.1, 2,4 and 5 show ratings per one chip.

## 5 Electrical characteristics (Ta=25°C, unless otherwise specified)

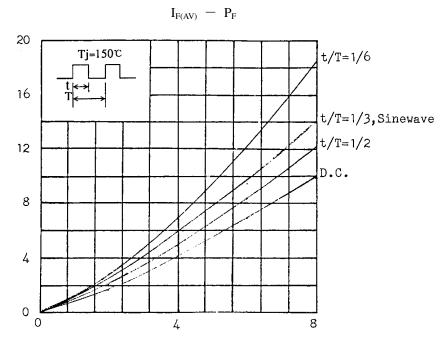
No.	Item	ymbol	Unit	Value	Conditions
1	Forward Voltage Drop	$V_{\mathrm{F}}$	V	2.0 max.	I <sub>F</sub> =5.0A
2	Reverse Leakage Current	$I_R$	mA	0.5 max.	$V_R = V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	mA	2.5 max.	V <sub>R</sub> =V <sub>RM</sub> , T <sub>j</sub> =150°C
4 Reverse Recover	Payarga Pagayary Tima	trr1	ns	100 max.	I <sub>F</sub> =I <sub>RP</sub> =100mA 90% Recovery point, Tj=25°C
	Reverse Recovery Time	trr2	ns	50 max.	I <sub>F</sub> =100mA, I <sub>RP</sub> =200mA 75% Recovery point ,Tj=25°C
5	5 Thermal Resistance		°C/W	4.0 max.	Between Junction and case

No.1, 2, 3 and 4 show characteristics per one chip.

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## 6 Characteristics

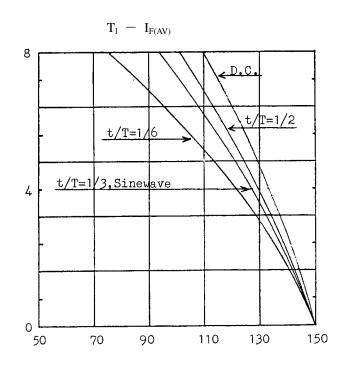
Forward Power Dissipation,  $P_{\rm F}\left(W\right)$ 



Average Forward Current,  $I_{F(AV)}(A)$ )

### 7 Derating

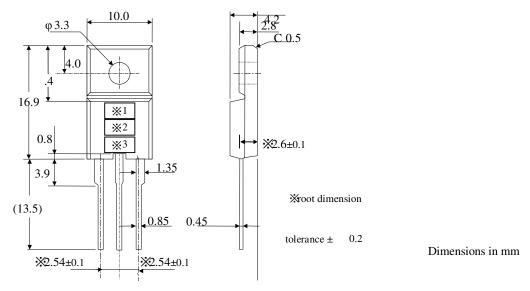
Average Forward Current, I<sub>F(AV)</sub> (A)



Lead Temperature ,  $T_{C}\left(^{\circ}C\right)$ 

#### 8 Package information

## 8-1 Package type, physical dimensions and material



### 8-2 Appearance

The body shall be clean and shall not bear any stain, rust or flaw.

### 8-3 Marking

Thurs Nous	Marking				
Type Name	*1 is type name	*2 is polarity	*3 is lot number		
FMG-24S	FMG24S	<b></b>	1st letter: Last digit of year 2nd letter: Month From 1 to 9 for Jan. to Sep.,		
FMG-24R	FMG24R	<b>→</b>	O for Oct., N for Nov., D for Dec. 3rd & 4th letter: Day ex. 2117 (Jan. 17, 2002)		

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