



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 適用範囲

Scope

この規格は、FMN-G14S について適用する。

The present specifications shall apply to Sanken silicon diode, FMN-G14S.

2 概要

Outline

種 別 Type	拡散型シリコン整流素子 Silicon Rectifier Diode		
構 造 Structure	樹脂封止型 Resin Molded	不燃化度：規格 UL94V - 0 相当品 Flammability : UL94V-0 (Equivalent)	
主 用 途 Applications	高周波整流用 High Frequency Rectification		

3 絶対最大定格

Absolute maximum ratings

No.	項 目 Item	記号 Symbol	単位 Unit	定 格 Rating	条 件 Conditions
1	ピーク非繰返し逆電圧 Transient Peak Reverse Voltage	V_{RSM}	V	400	
2	ピーク繰返し逆電圧 Peak Reverse Voltage	V_{RM}	V	400	
3	平均順電流 Average Forward Current	$I_{F(AV)}$	A	5.0	$T_c=121^{\circ}\text{C}$, Sinewave
4	サージ順電流 Peak Surge Forward Current	I_{FSM}	A	70	10msec. 正弦半波単発 Half sinewave, one shot
5	I^2t 限界値 I^2t Limiting Value	I^2t	A^2s	24.5	$1\text{msec} \leq t \leq 10\text{msec}$
6	接合部温度 Junction Temperature	T_j	$^{\circ}\text{C}$	-40~+150	
7	保存温度 Storage Temperature	T_{stg}	$^{\circ}\text{C}$	-40~+150	
8	絶縁耐圧 Dielectric Strength		kV	A.C. 1.0	リード・ケース間(1分間) Junction and case(1 minute)

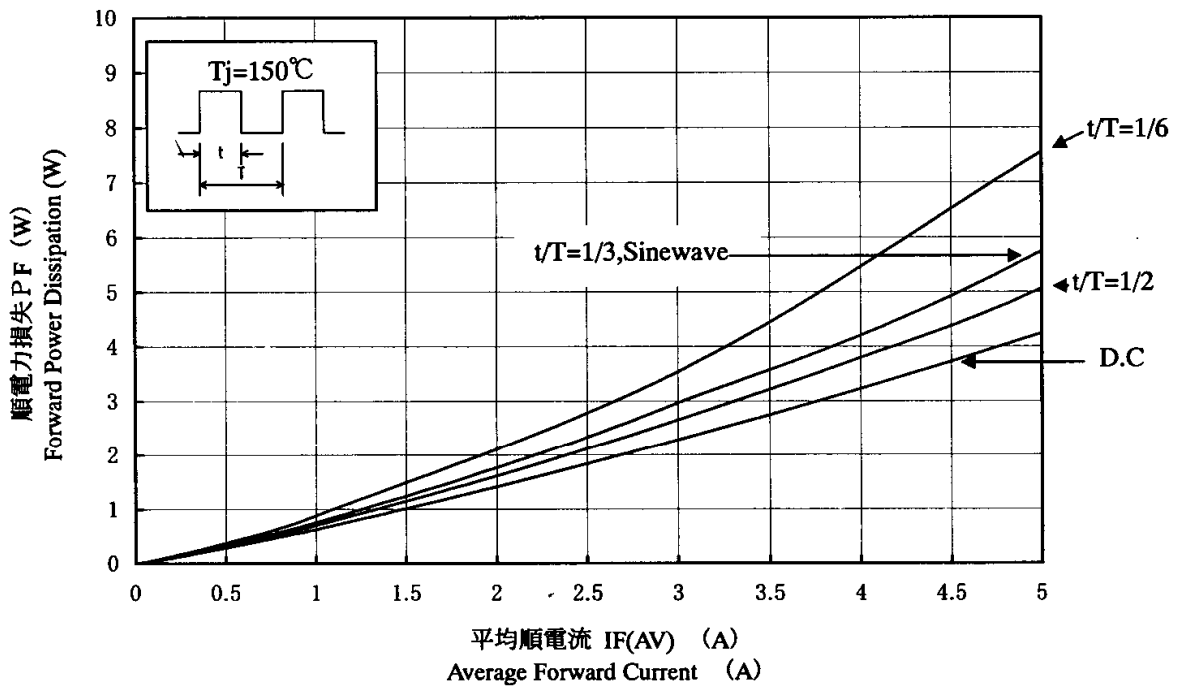
4 電気的特性 (特に指定の無い場合は、25°Cとする。)

Electrical characteristics ($T_a=25^{\circ}\text{C}$, unless otherwise specified)

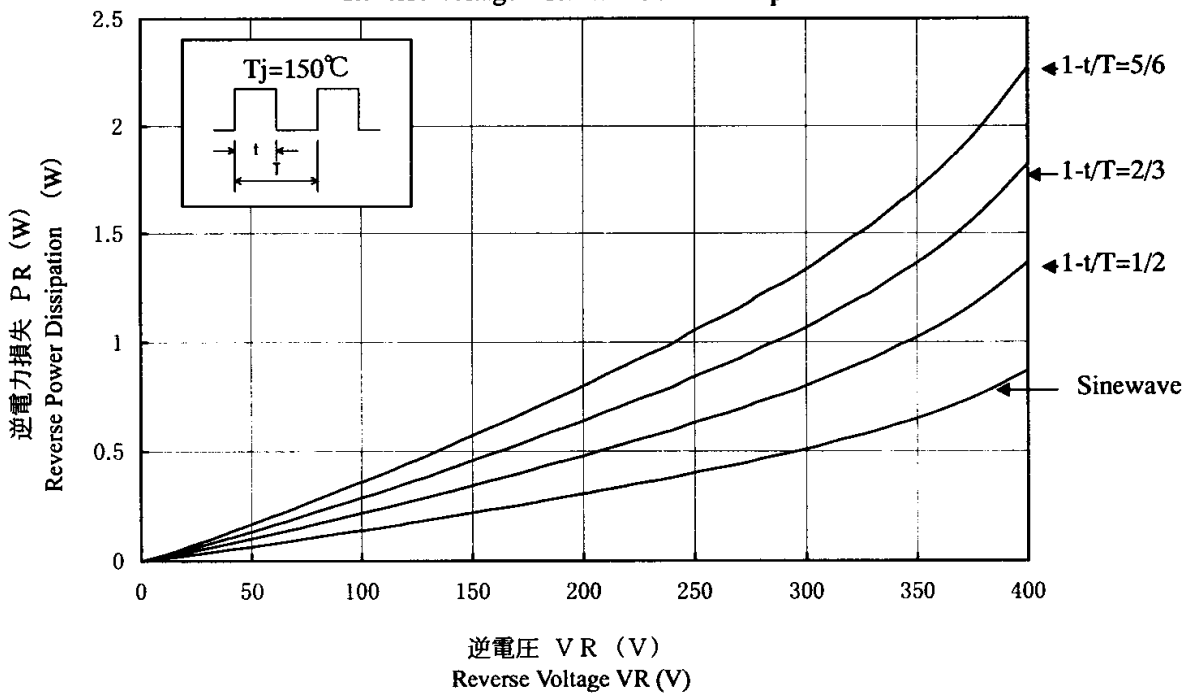
No	項 目 Item	記号 Symbol	単位 Unit	特 性 Value	条 件 Conditions
1	順方向降下電圧 Forward Voltage Drop	V_F	V	1.0 max.	$I_F=5.0\text{A}$
2	逆方向漏れ電流 Reverse Leakage Current	I_R	μA	50 max.	$V_R=V_{RM}$
3	高温逆方向漏れ電流 Reverse Leakage Current Under High Temperature	$H \cdot I_R$	mA	10 max.	$V_R=V_{RM}$, $T_j=150^{\circ}\text{C}$
4	逆方向回復時間 Reverse Recovery Time	trr1	ns	100 max.	$I_F=I_R=500\text{mA}$, 90%回復点 $T_j=25^{\circ}\text{C}$ 90% Recovery point
		trr2	ns	50 max.	$I_F=500\text{mA}$, $I_R=1\text{A}$, 75%回復点 $T_j=25^{\circ}\text{C}$ 75% Recovery point
5	熱抵抗 Thermal Resistance	$R_{th(j-c)}$	$^{\circ}\text{C}/\text{W}$	4.0 max.	接合部- ケース間 Between Junction and case

5 特性
Characteristics

平均順電流—順電力損失
Average Forward Current—Forward Power Dissipation



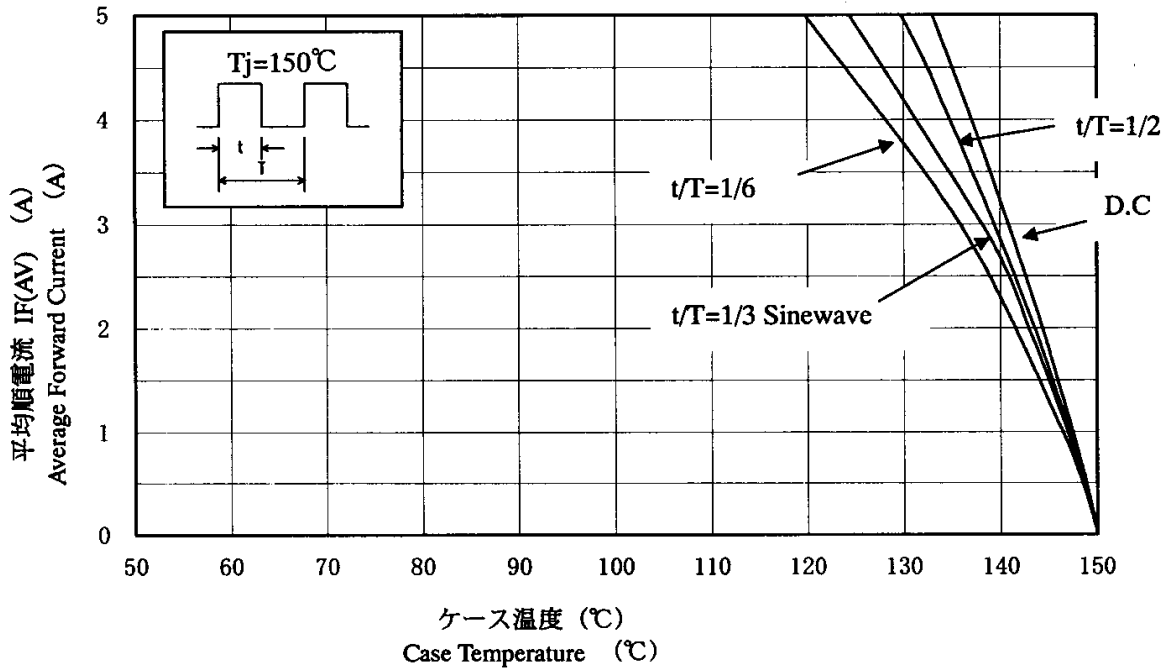
逆電圧—逆電力損失
Reverse Voltage—Reverse Power Dissipation



6 減定格
Derating

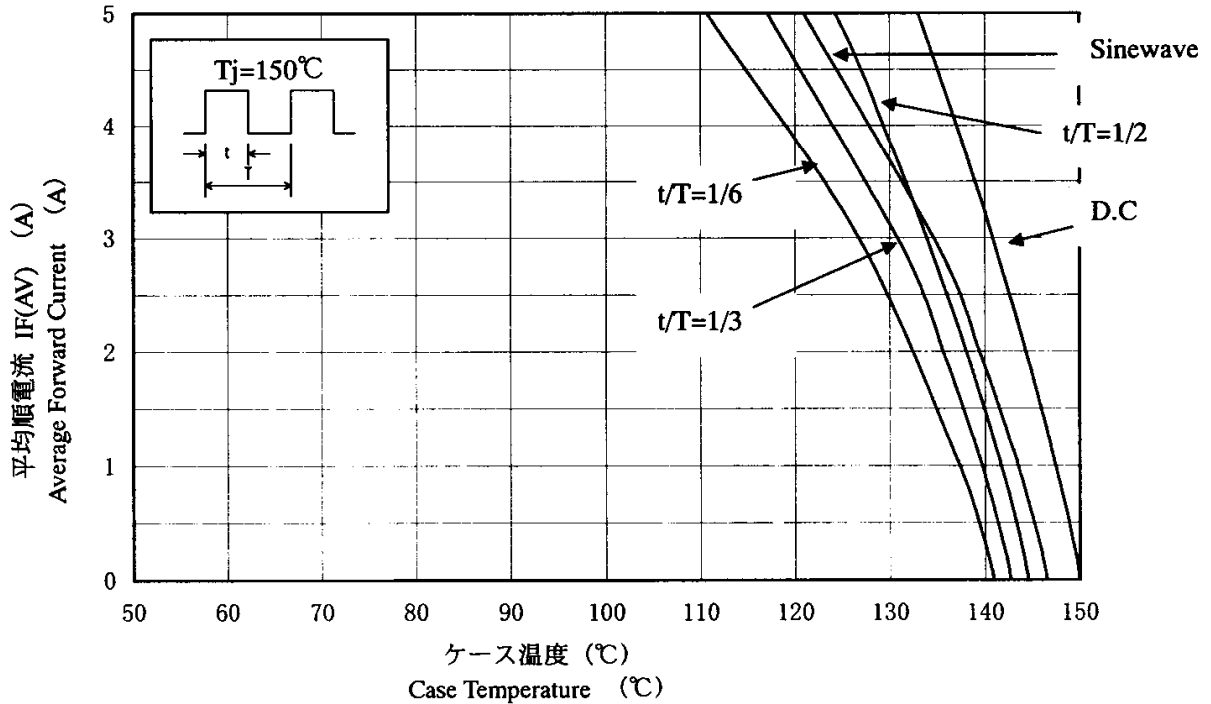
ケース温度—平均順電流
 $T_C - I_{F(AV)}$

$V_R=0(V)$



ケース温度—平均順電流
 $T_C - I_{F(AV)}$

$V_R=400(V)$

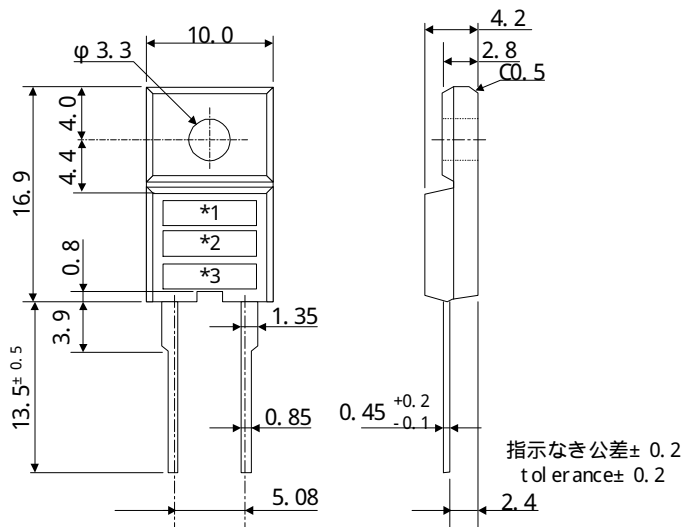


7 外形

Package information

7-1 外形、寸法および材質

Package type, physical dimensions and material



単位：mm
Dimensions in mm

7-2 外観

Appearance

本体は、汚れ、傷、亀裂等なく綺麗であること。

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

7-3 標示

Marking

品名 Type Name	標 示 Marking		
	*1 品名 Type Name	*2 極性 Polarity	*3 ロット番号 Lot number
FMN-G14S	FMNG14	S	第1文字：年(西暦年号下一桁) 1st letter: Last digit of year 第2文字：月 1~9月→1~9 2nd letter: Month From 1 to 9 for Jan. to Sep., 10月→O、11月→N、12月→D O for Oct., N for Nov., D for Dec. 第3,4文字：日 3rd & 4th letter: Day 例：4812 (2004年8月12日製造) ex. 4812 (Aug. 12, 2004)