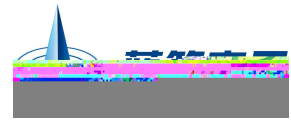


	Date	Quantity / fi	Description	Unit	#
E	2017-11				
F	2019-5-6	1\$ 4\$			

# US1AF~US1MF

Rev.G Nov.-2020



DATA SHEET

## / Descriptions

K L M N O P Q R S T U V W 50V~1000V R X T U 8 W 1.0A R Y Z SMAF / O I

Surface Mount Ultrafast Recovery Rectifier, Reverse Voltage:50 to1000V, Forward Current:1.0A, SMAF thin package.

## / Features

[ \ ] ^ \_ ` R a b c R d e f g 2011/65/EU h i RoHS j k R l m n o p q O R d r s t l

Glass Passivated Chip Junction High efficiency Lead free in comply with EU R HS 2011/65/EU directives For surface mounted applications, Halogen free product.

## / Applications

u v m w.

General purpose.

## / Equivalent Circuit



## / Pinning



The recommended mounting pad size



## / Marking

x 5 6 y z l See Marking Instructions.



/ Absolute Maximum Ratings(Ta=25 )

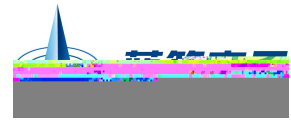
参数 Parameter	参数符号 Symbol	数值 Rating							单位 Unit
		US1AF	US1BF	US1DF	US1GF	US1JF	US1KF	US1MF	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Peak Reverse Current	$I_{RM}$	1.0							A

Pe  
Su  
ms

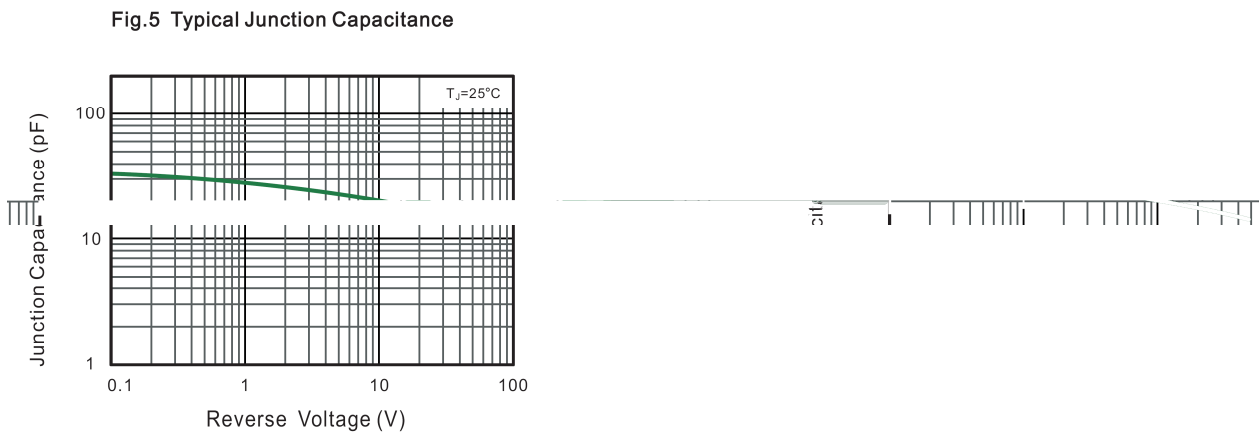
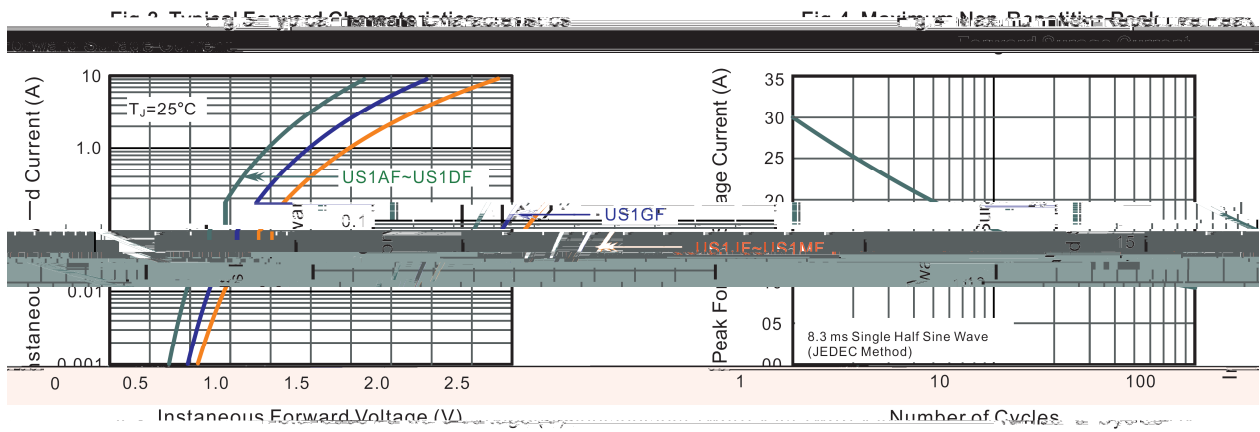
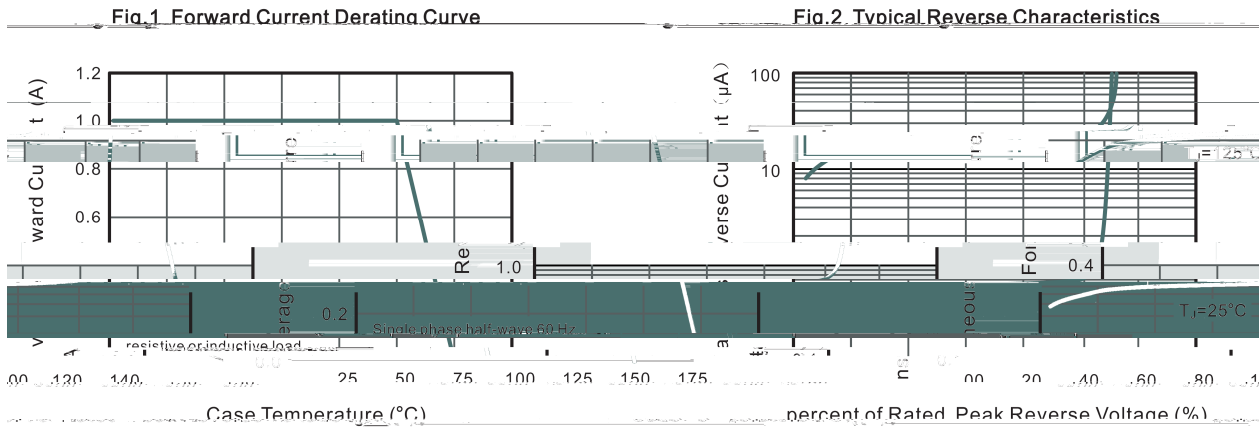
Note:

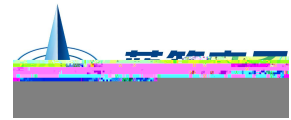
- 1) Measured at 1 MHz and applied reverse voltage of 4 V D.C.
- 2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

参数 Parameter	参数符号 Symbol	测试条件 Test condition	数值 Rating							单位 Unit
			US1AF	US1BF	US1DF	US1GF	US1JF	US1KF	US1MF	
Maximum Instantaneous Forward Voltage	$V_F$	$I_F=1.0A$	1.0			1.3	1.65			V
Maximum DC Reverse Current at Maximum DC Blocking Voltage	$I_R$	$T_a=25^{\circ}C$	5.0							uA
		$T_a=125^{\circ}C$	100							
Maximum Reverse Recovery Time <sup>(1)</sup>	$T_{rr}$	$I_F=0.5A$ $I_R=1.0A$ $I_{rr}=0.25A$	50				75			ns

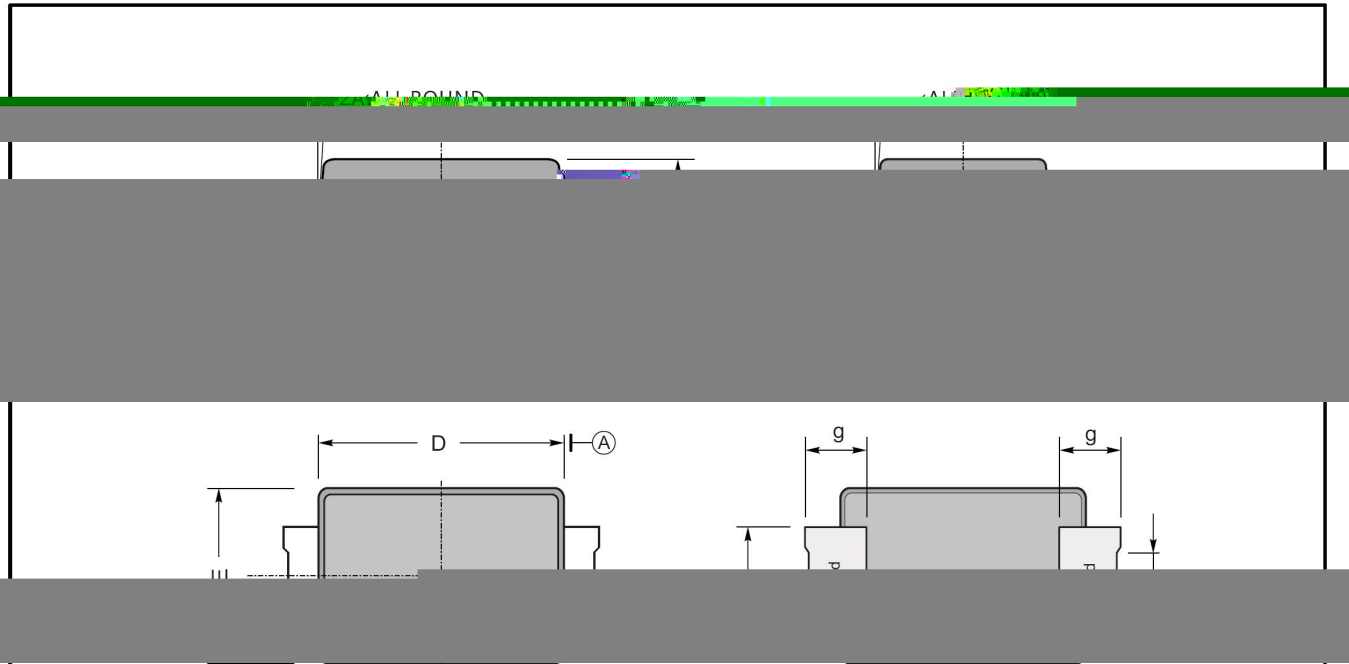


/ Electrical Characteristic Curve





**/ Package Dimensions**



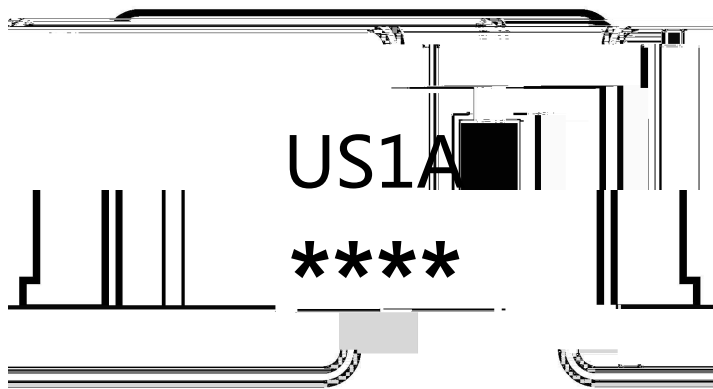
Top View

Bottom View

UNIT		A	C	D	E	e	g	H <sub>E</sub>	b	∠
	max	1.2	0.20	3.7	2.7	1.6	1.2	4.9	1.05	
	min	0.9	0.12	3.3	2.4	1.3	0.8	4.4	0.65	



/ Marking Instructions



US1A  
\*\*\*\*

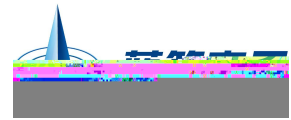
1

3

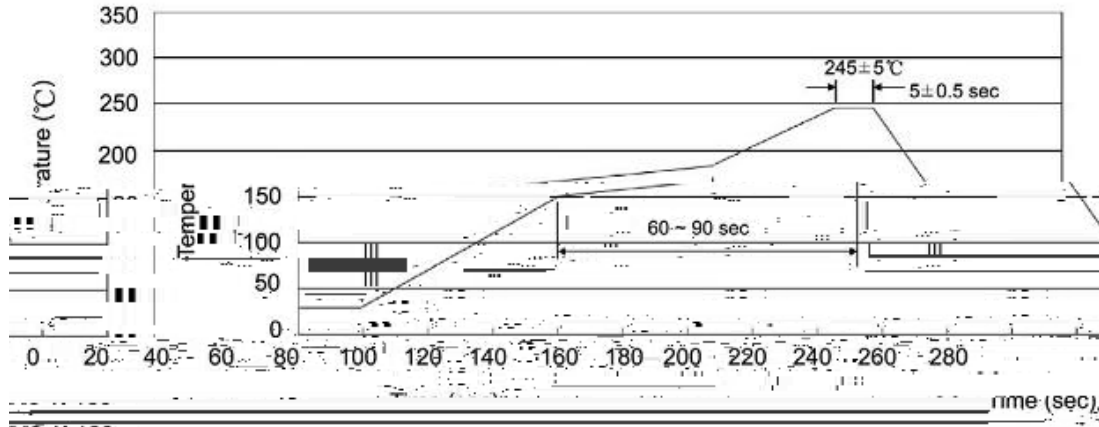
Note:

US1A Product Type Code

\*\*\*\* Lot No. Code The 1st means:YM Code The last 3 means:little Lot No Code



( ) /



**Note:**

- |   |       |     |           |        |  |
|---|-------|-----|-----------|--------|--|
| 1 | 150   | 180 | 60        | 90sec; | 1.Preheating:150~180°C, Time:60~90sec.   |
| 2 | 245±5 |     | 5±0.5sec; |        | 2.Peak Temp.:245±5°C, Duration:5±0.5sec. |
| 3 |       | 2   | 10°C/sec. |        | 3. Cooling Speed: 2~10°C/sec.            |

/ **Resistance to Soldering Heat Test Conditions**

260±5°C                      10±1 sec.                      Temp.:260±5°C                      Time:10±1 sec

/ **Packaging SPEC.**

/ **REEL**

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SMAF	3000	5	15000	5	75000	7" x12	185X180X105	390X385X205

/ **Notices**