

A	2018-1				

B 2021-6-

/ Descriptions

50V~1000V 1.0A SMA

Surface Mount General Purpose Silicon Rectifiers, Reverse Voltage 50 to1000V,Forward
Current:1.0A ,SMA package.

/ Features

RoHS 2011/65/EU

Glass Passivated Chip Junction, Lead free in comply with EU RoHS 2011/65/EU directives, For
surface mounted applications. HF product.

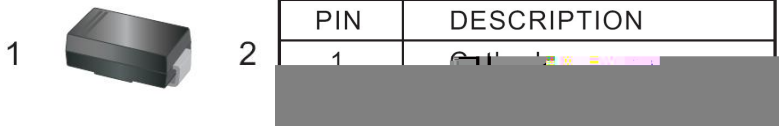
/ Applications

General purpose.

/ Equivalent Circuit



/ Pinning



The recommended mounting and size

/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

参数 Parameter	符号 Symbol	数值 Rating							单位 Unit
		S1A	S1B	S1D	S1G	S1J	S1K	S1M	
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
Maximum Average Forward Rectified Current	$I_F (AV)$	1.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30							A
Typical Junction Capacitance at $V_R=4V$ $f=1MHz$	C_j	15							pF
Typical Thermal Resistance ¹⁾	$R_{\theta JA}$	75							°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150							°C

Note:

1) P.C.B. mounted with 2.0 X 2.0" (5 X5cm) copper pad areas.

/ Electrical Characteristics(Ta=25)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating							单位 Unit
			S1A	S1B	S1D	S1G	S1J	S1K	S1M	
Maximum Instantaneous Forward Voltage	V_F	$I_F=1.0A$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_a=25^{\circ}C$	5.0							μA
		$T_a=125^{\circ}C$	50							μA

/ **Electrical Characteristic Curve**

Fig.1 Forward Current-Forward Voltage Curve

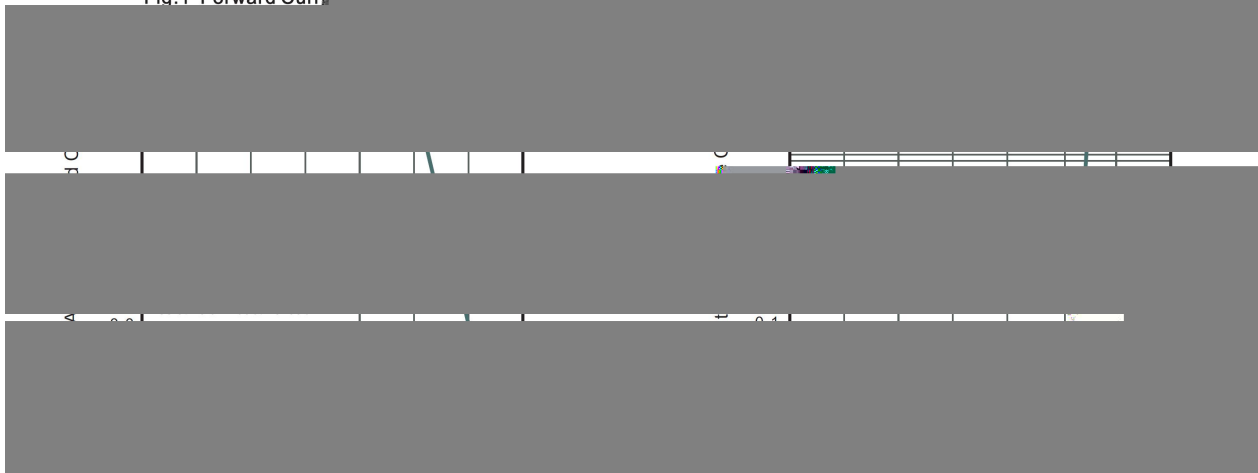


Fig.2 Typical Reverse Characteristics

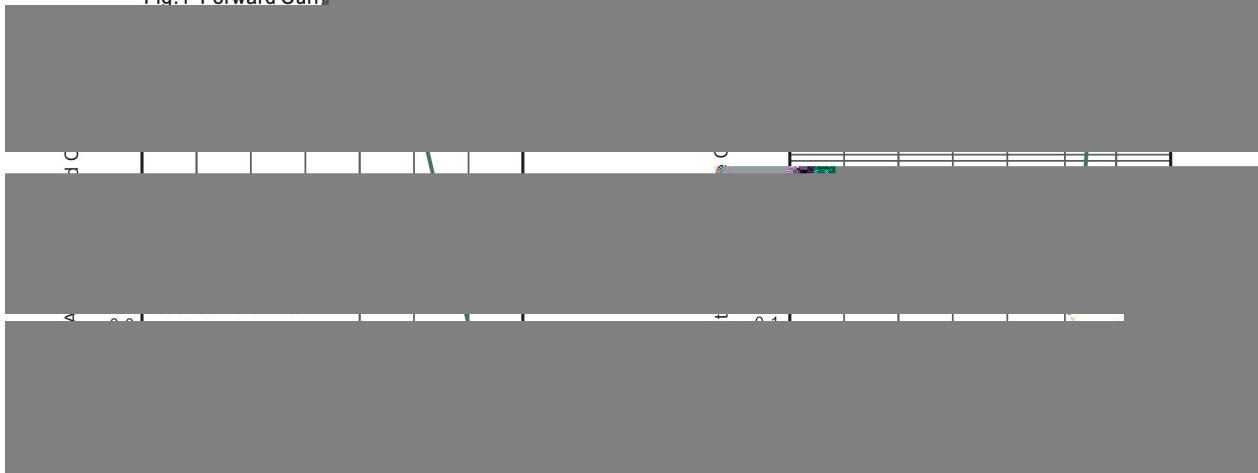


Fig.3 Typical Forward Characteristics

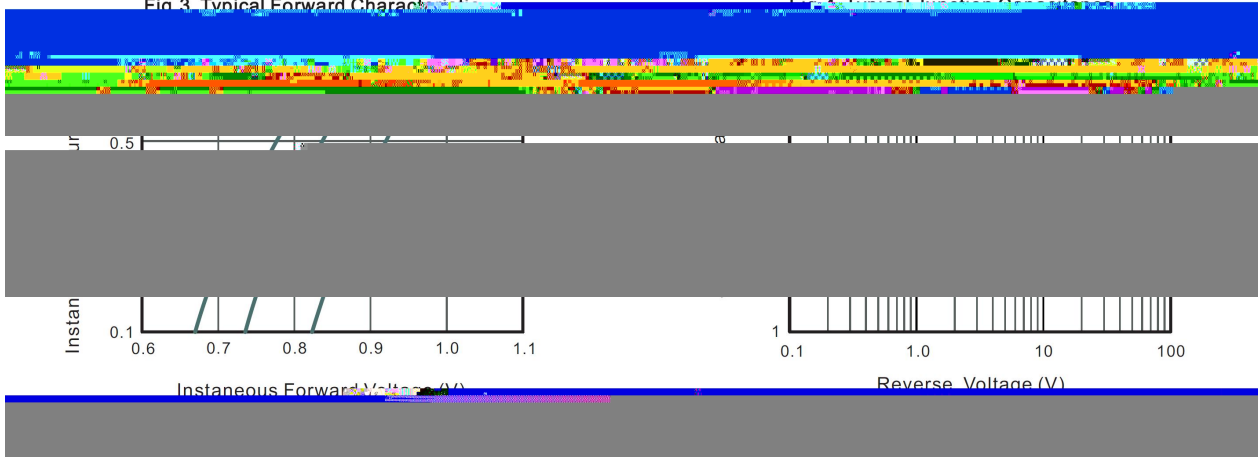


Fig.4 Typical Reverse Characteristics

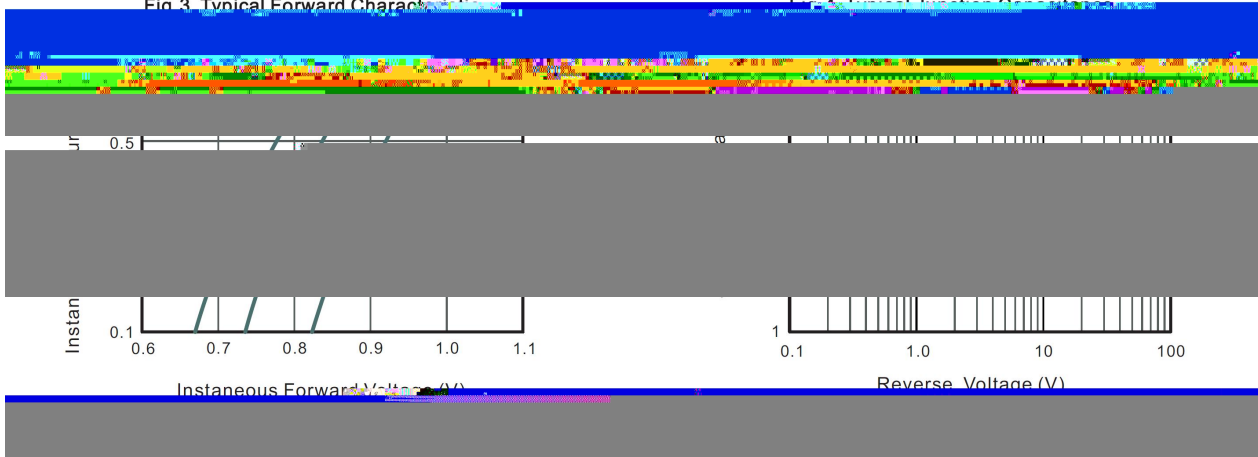
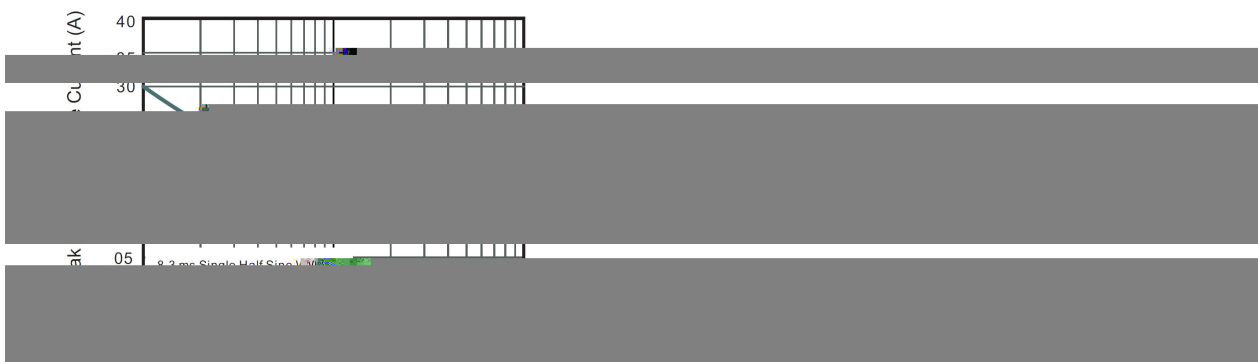
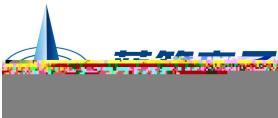


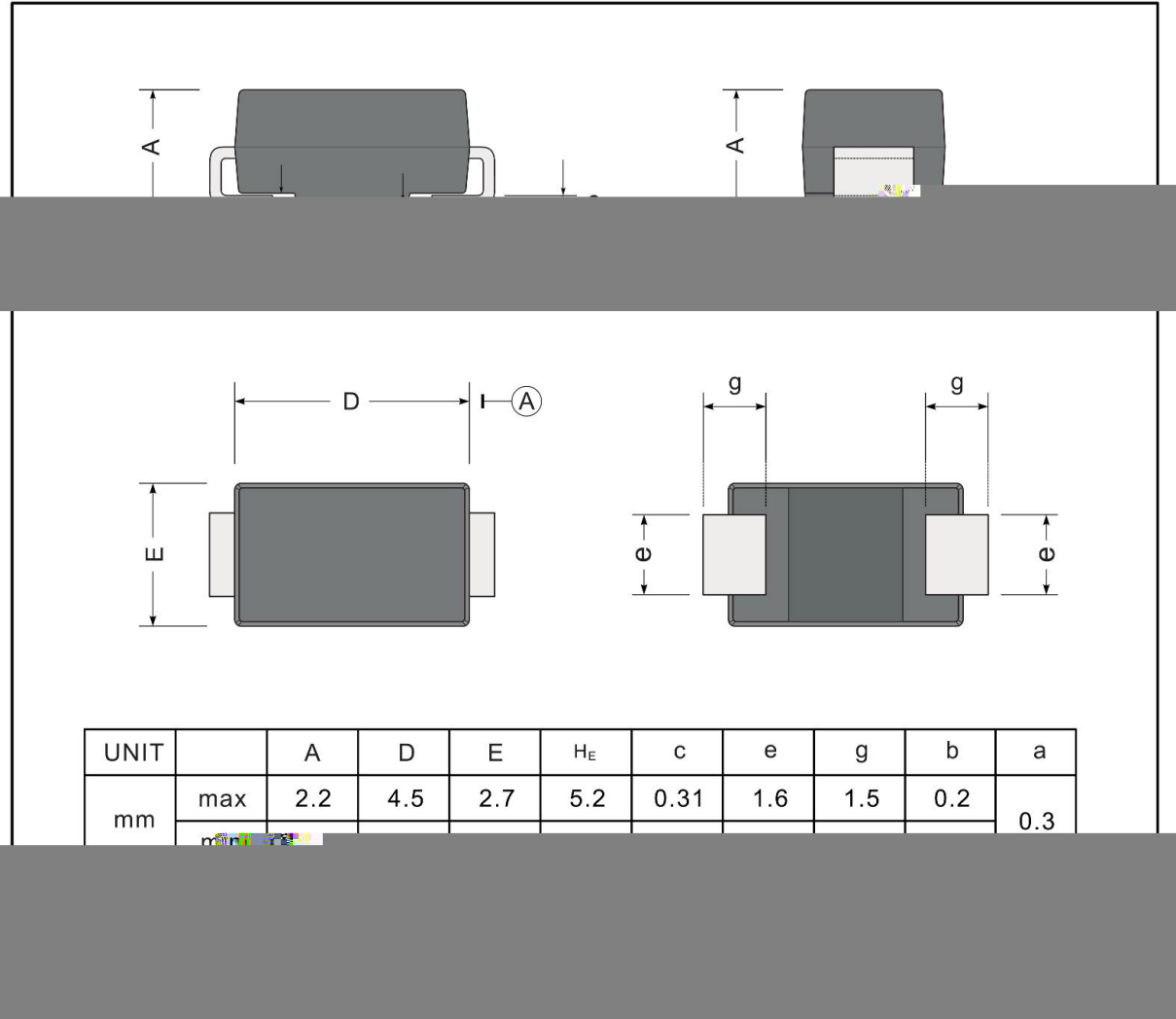
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current





/ Package Dimensions

SMA



Marking



/ Marking Instructions



S1A

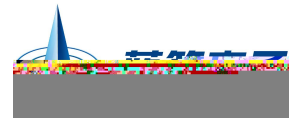
1 *

3 *

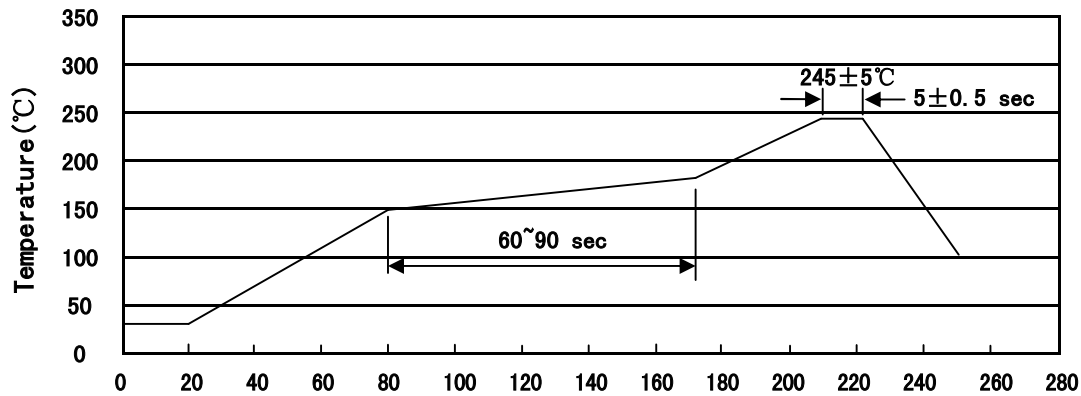
Note:

S1A Product Type Code

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



() / **Temperature Profile for IR Reflow Soldering(Pb-Free)**



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	Units					Dimension (unit mm ³)		
	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	Outer Box
SMA	5000	2	10000	7	70000	13" ×12	336X336X40	380X335X366

/ **Notices**