

S10AC~S10MC

Rev.A May.-2021



DATA SHEET

/ Revised record

A	2021-5-31				

S10AC~S10MC

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DATA SHEET

/ Descriptions

50V~1000V

10A SMC

Surface Mount General Purpose Silicon Rectifiers, Reverse Voltage 50 to1000V,Forward Current:10A ,SMC thin 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. Halogen free product.

/ Applications

General purpose.

/ Equivalent Circuit



/ Marking

See Marking Instructions.



参数 Parameter	符号 Symbol	数值 Rating							单位 Unit
		S10AC	S10BC	S10DC	S10GC	S10JC	S10KC	S10MC	
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	$I_F (AV)$	10							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	200							A
Typical Junction Capacitance ¹⁾	C_j	130							pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	35							°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150							°C

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	符号 Symbol	测试条件 Test Conditions	数值 Rating							单位 Unit
			S10AC	S10BC	S10DC	S10GC	S10JC	S10KC	S10MC	
Maximum Instantaneous Forward Voltage	V_F	$I_F=10A$	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I									

/ Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

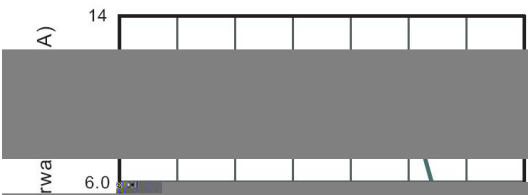
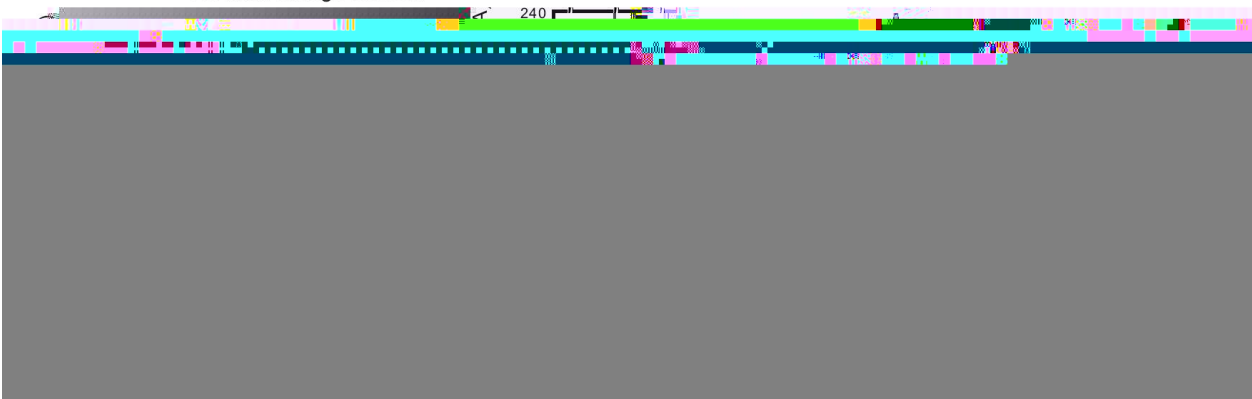


Fig.2 Typical Reverse Characteristics

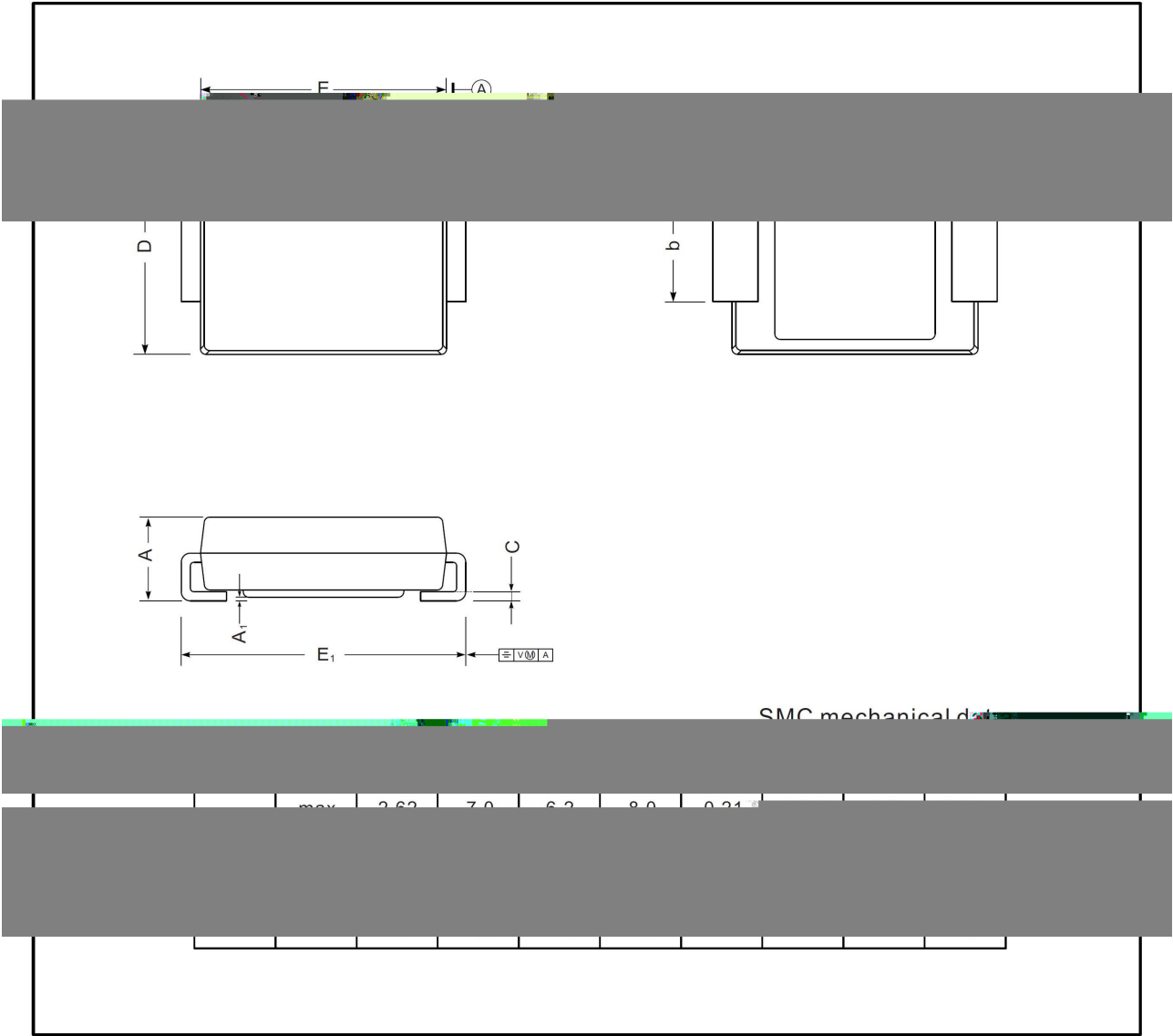


Forward Surge Current

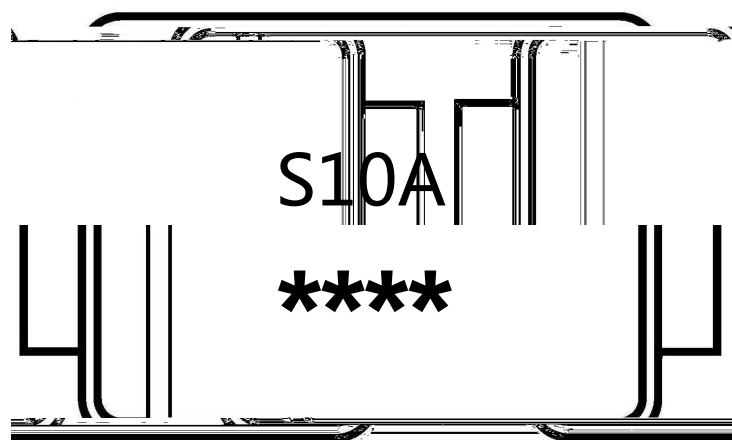


/ Package Dimensions

SMC



/ Marking Instructions



说明：

S10A： 为型号代码

*****： 为生产批号追溯码，第 1 个*为年月代码，后面 3 个*为当月小批号代码

Note:

S10A： Product Type Code

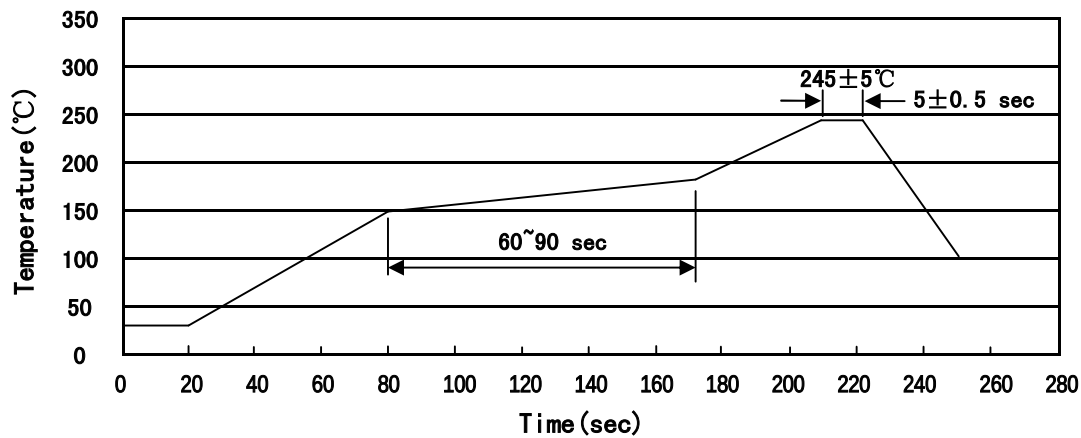
*****： Lot No. Code ,The 1st * means:YM Code ,The last 3 * means:little Lot No Code

Marking

Type number	Marking code
S10AC	S10A
S10BC	S10B
S10DC	S10D
S10GC	S10G
S10JC	S10J
S10KC	S10K
S10MC	S10M



() / 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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只 卷盘	卷盘 盒	只 盒	盒 箱	只 箱		盒	箱
SMC	3000	2	6000	6	36000	13" ×16	337X337X49	380X335X366

/ Notices