

Rev.A M

A	2021-5-31				



Rev.A May.-2021

50V ~ 1000V

10A SMC

Surface Mount General Purpose Silicon Rectifiers, Reverse Voltage 50 to 1000V, Forward Current: 10A, SMC thin package.

RoHS 2011/65/EU



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Parameter	Symbol	Rating							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_{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.

Parameter	Symbol	Test Conditions	数值 Rating							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									

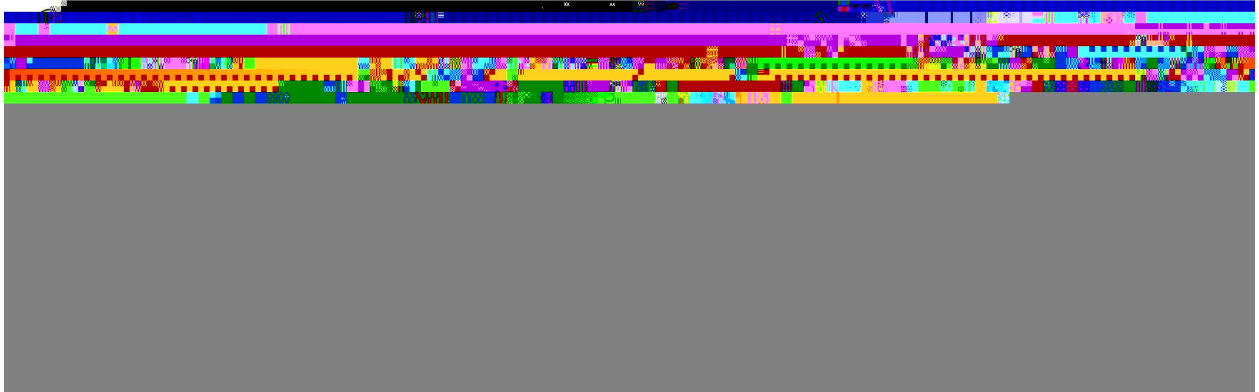


Fig.1 Forward Current Derating Curve

Fig.2 Typical Reverse Characteristics

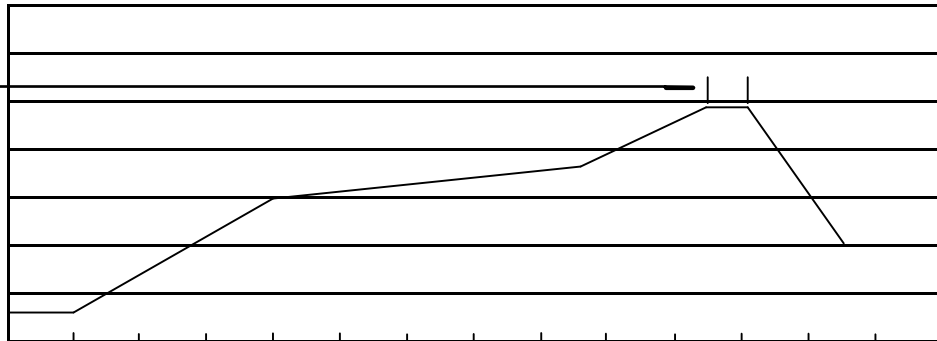


Forward Surge Current





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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. |

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

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box 盒	Outer Box 箱
SMC	3000	2	6000	6	36000	13" x16	337X337X49	380X335X366