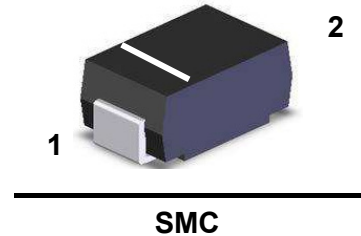


Surface Mount General Purpose Silicon Rectifiers

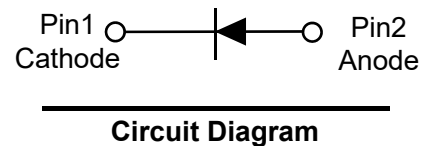
Feature

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Lead free in comply with EU RoHS 2011/65/EU directives



Mechanical Characteristics

- Case: SMC
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.22g / 0.0077oz



Maximum Ratings and Thermal Characteristics (T_A=25°C unless otherwise noted)

Parameter		Symbol	PS10AC	PS10BC	PS10DC	PS10GC	PS10JC	PS10KC	PS10MC	Units
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,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I _{FSM}	200							A
Peak Forward Surge Current,1ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)			400							
I ² t Rating for fusing (3ms≤t≤8.3ms)		I ² t	166							A ² S
Max Instantaneous Forward Voltage at 10 A		V _F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _a = 25°C	I _R	5.0							μA
	T _a = 125°C		100							
Typical Junction Capacitance ¹⁾		C _J	64							pF
Typical Thermal Resistance ²⁾		R _{θJA}	37							°C/W
		R _{θJC}	10							
		R _{θJL}	13							
Operating Junction and Storage Temperature Range		T _J , T _{STG}	-55 ~ +150							°C

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 1.5" X 1.5" (3.81 X 3.81 cm) copper pad areas.

Typical Characteristics

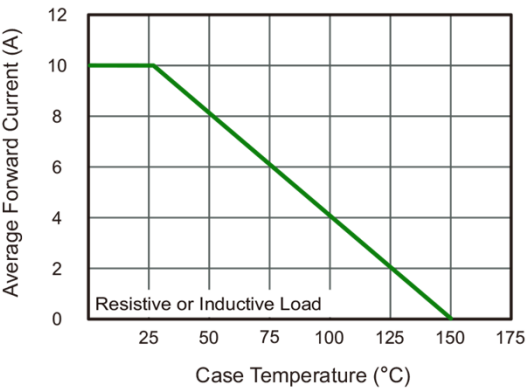


Fig.1 Forward Current Derating Curve

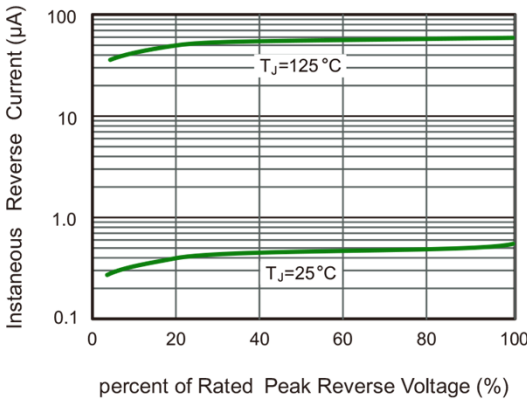


Fig.2 Typical Instantaneous Reverse Characteristics

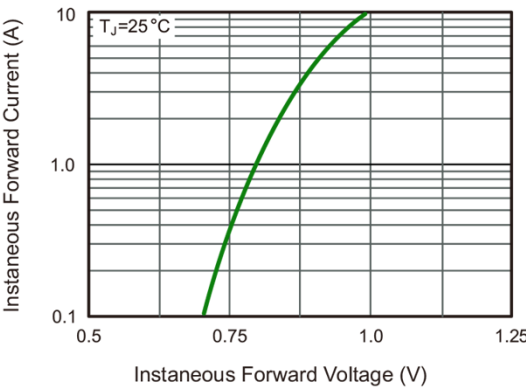


Fig.3 Typical Forward Characteristic

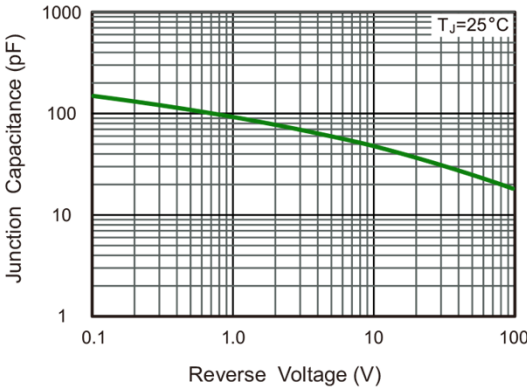


Fig.4 Typical Junction Capacitance

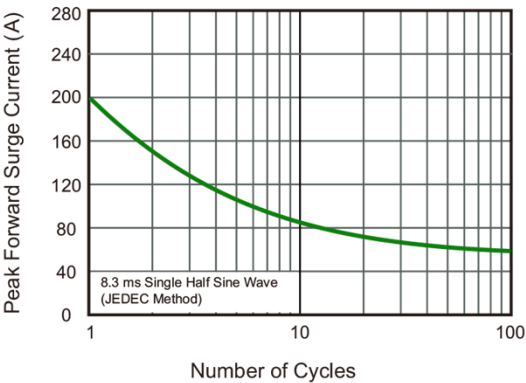
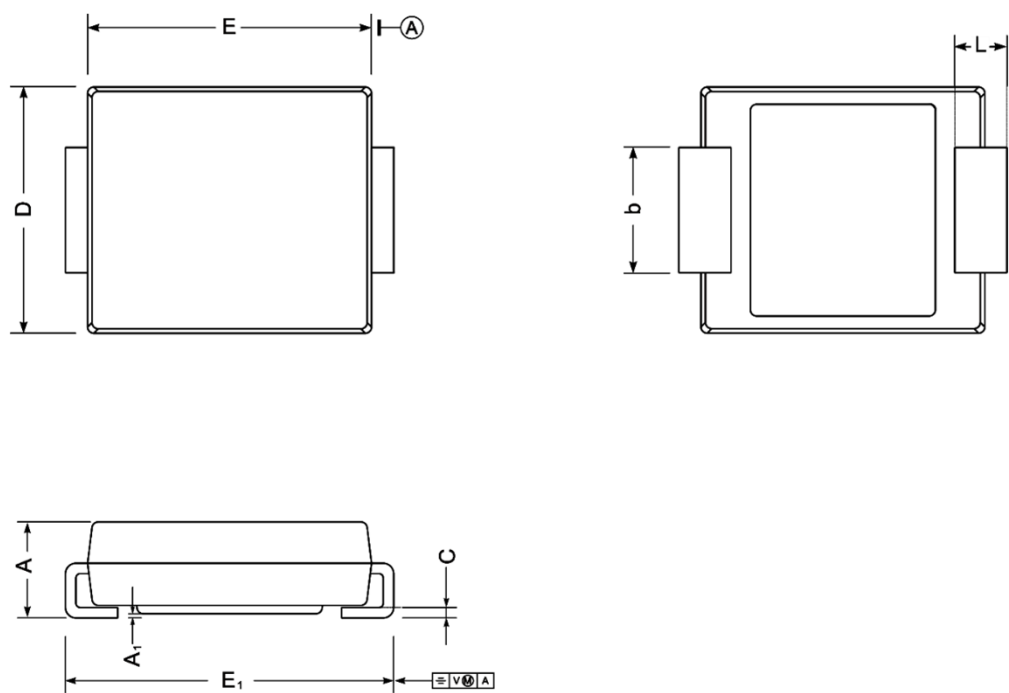


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

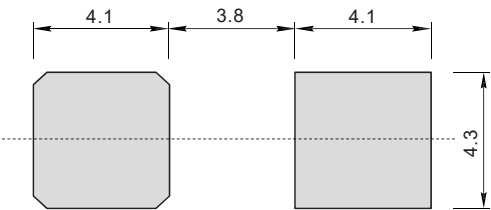
Surface Mount General Purpose Silicon Rectifiers

PS10xC_Series

Product Dimension (SMC)



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	2.00	2.62	0.079	0.103
E	6.50	7.00	0.256	0.276
D	5.60	6.20	0.220	0.244
E ₁	7.60	8.00	0.299	0.315
A ₁	0.05	0.21	0.002	0.008
C	0.15	0.31	0.006	0.012
L	0.90	1.60	0.035	0.063
b	2.75	3.25	0.108	0.128



Suggested PCB Layout

Unit: mm

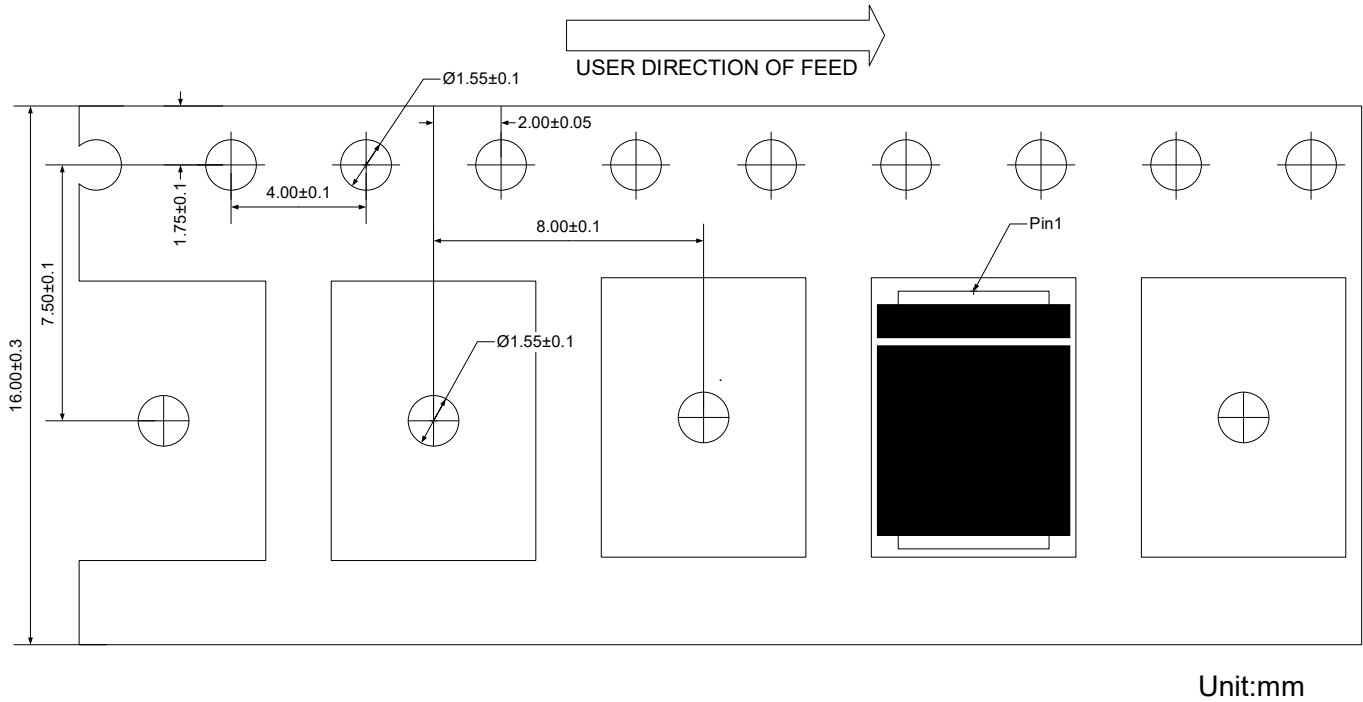
Surface Mount General Purpose Silicon Rectifiers

PS10xC_Series

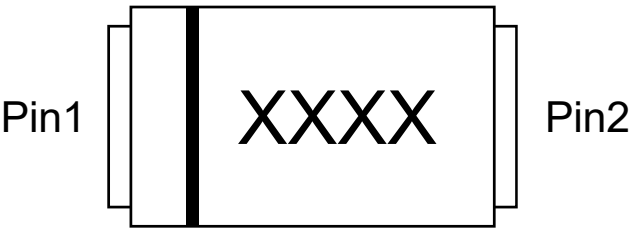
Ordering Information

Package	Reel	Shipping
SMC	13"	3000 / Tape & Reel

Load With Information




Marking Information



Note: Detailed Marking See table right

Type number	Marking code
PS10AC	S10A
PS10BC	S10B
PS10DC	S10D
PS10GC	S10G
PS10JC	S10J
PS10KC	S10K
PS10MC	S10M


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