















ESD

TVS

MOS

LDO

Diode

Sensor

DC-DC

Product Specification

Domestic Part Number	S3AC THRU S3MC
Overseas Part Number	S3AC THRU S3MC
▶ Equivalent Part Number	S3AC THRU S3MC





Surface Mount General Purpose Silicon Rectifiers Reverse Voltage - 50 to 1000 V

Forward Current - 3 A

FEATURES

- 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 DATA

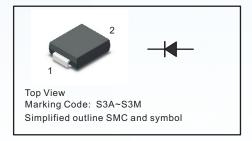
· Case: SMC

• Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.22g / 0.0077oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	S3AC	S3BC	S3DC	S3GC	S3JC	S3KC	S3MC	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)}	3						Α	
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I _{FSM}	90						А	
Maximum Instantaneous Forward Voltage at 3 A	V _F	1.0						V	
Maximum DC Reverse Current $T_a = 25 ^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_a = 125 ^{\circ}\text{C}$	I _R	5 100					μA		
Typical Junction Capacitance (1)	C _j	40					pF		
Typical Thermal Resistance (2)	$R_{ heta_{JA}} \ R_{ heta_{JC}}$	40 16					°C/W		
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150					°C		

^(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

⁽²⁾ P.C.B. mounted with 2.0" \times 2.0" (5 \times 5 cm) copper pad areas.



Fig.1 Forward Current Derating Curve

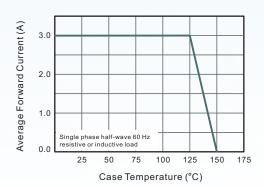


Fig.2 Typical Reverse Characteristics

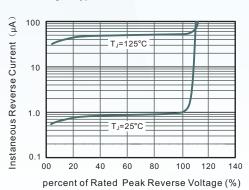


Fig.3 Typical Forward Characteristic

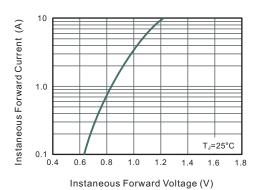


Fig.4 Typical Junction Capacitance

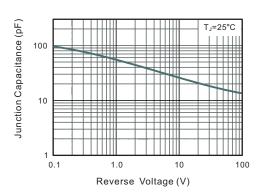
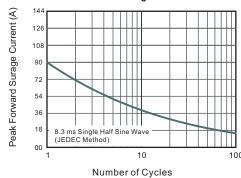


Fig.6 Maximum Non-Repetitive Peak Forward Surage Current

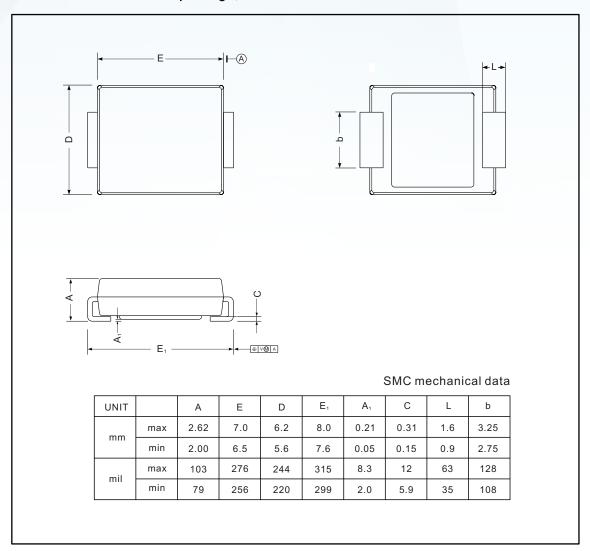




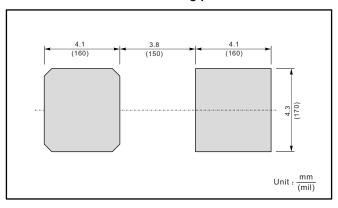
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMC



The recommended mounting pad size



Marking

Type number	Marking code			
S3AC	S3A			
S3BC	S3B			
S3DC	S3D			
S3GC	S3G			
S3JC	S3J			
S3KC	S3K			
S3MC	S3M			



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