



PRIMARY CHARACTERISTICS

V_{RRM}	50V,100V,200V,400V 600V,800V1000V
I_o	5A
V_F	1.15V
$T_{J,Max}$	150°C

SMC(DO-214AB)

PACKAGE

Marking : See Table

Ex : S5GC



V:Product Lines

Y:A.D. late code, EX : 4-2014,5-2015

M:Month, EX : 1-1,2-2,...-10-O,11-N,12-D



FEATURES

- Glass passivated device
- Ideal for surface mounted applications
- Low leakage current
- Metallurgically bonded construction

MECHANICAL DATA

- Case : Molded plastic, SMC(DO-214AB)
- Polarity : Shown above
- Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026
- Epoxy : UL94-V0 rated flame retardant

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half wave, 60Hz, resistive of inductive load.

For capacitive load, derate current by 20%

RATINGS	SYMBOL	S5AC	S5BC	S5DC	S5GC	S5JC	S5KC	S5MC	UNIT
Marking Code		S5AC	S5BC	S5DC	S5GC	S5JC	S5KC	S5MC	
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Current at TA = 70°C	Io	5.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	125							Amps
Typical Thermal Resistance (Note 2)	ROJA	80							°C/W
	ROJC	45							
Typical Junction Capacitance (Note 1)	CJ	60							pF
Operating Temperature Range	TJ	-55 to +150							°C
Storage Temperature Range	TsTg	-55 to +150							°C

CHARACTERISTICS		SYMBOL	S5AC	S5BC	S5DC	S5GC	S5JC	S5KC	S5MC	UNIT
Maximum Forward Voltage at 5.0A DC(Note 3)		V _F	1.15							Volts
Maximum Average Reverse Current at	@TA=25°C	I _R	5.0							μAmps
Rated DC Blocking Voltage	@TA=125°C		50							

NOTES :1. Measured at 1.0 MHz and applied average voltage of 4.0VDC

2. Thermal resistance junction to terminal, 10.0X10.0mm2 copper pads to each terminal.

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

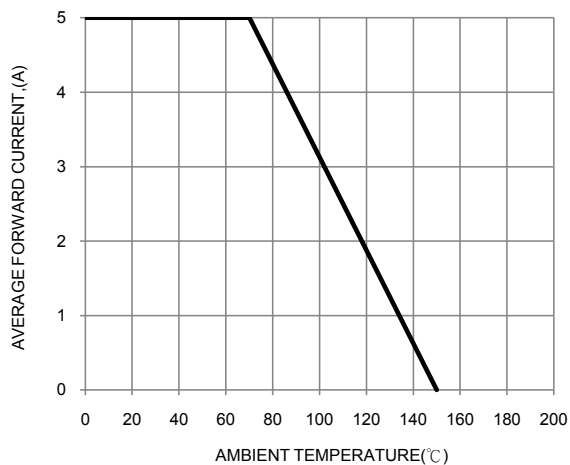


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

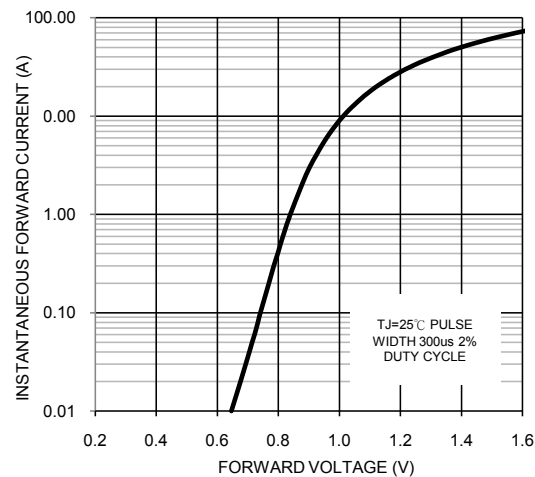


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

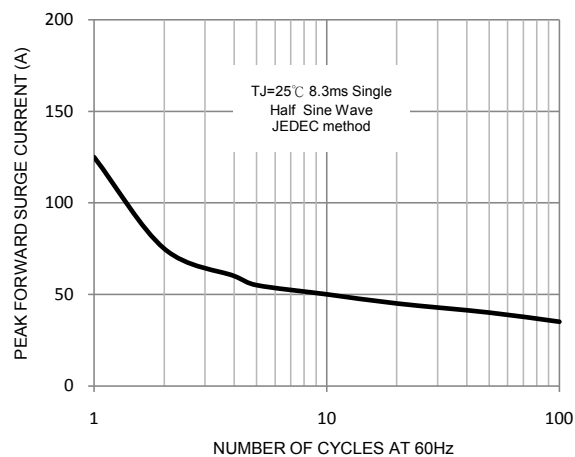


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

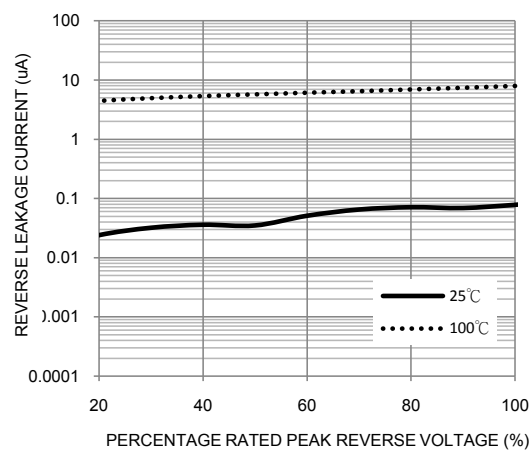
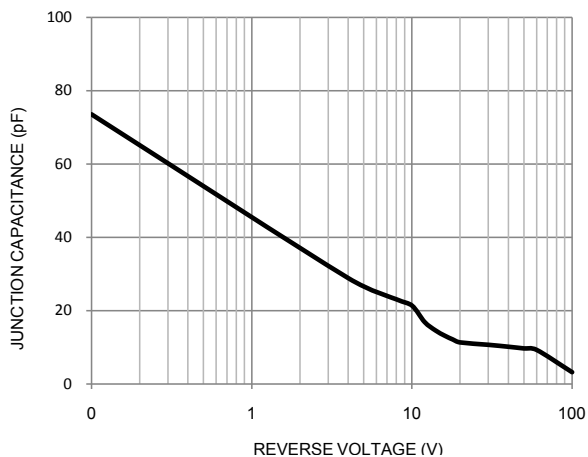
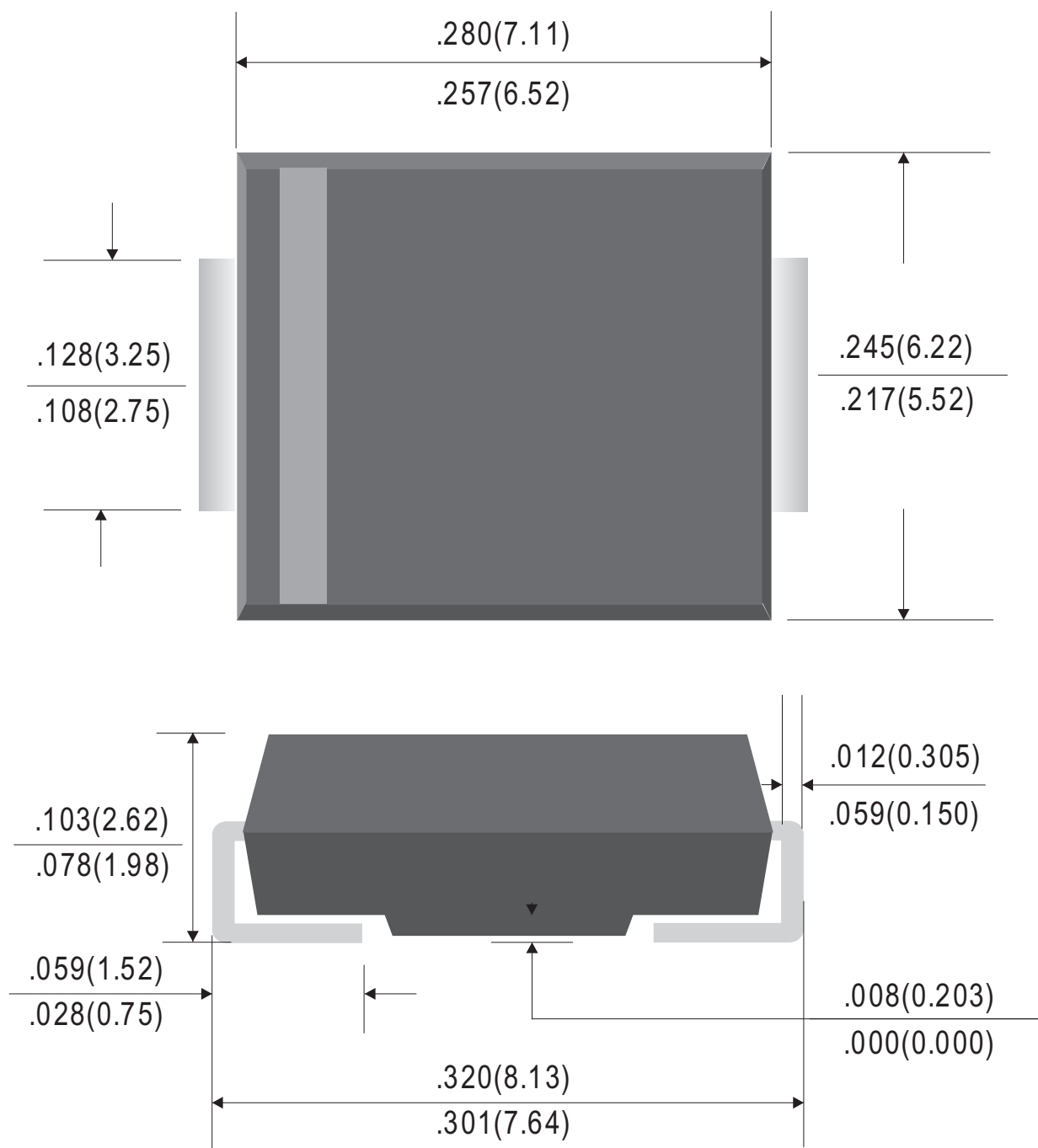


FIG. 5-TYPICAL JUNCTION CAPACITANCE



Outline Drawing

SMC(DO-214AB)



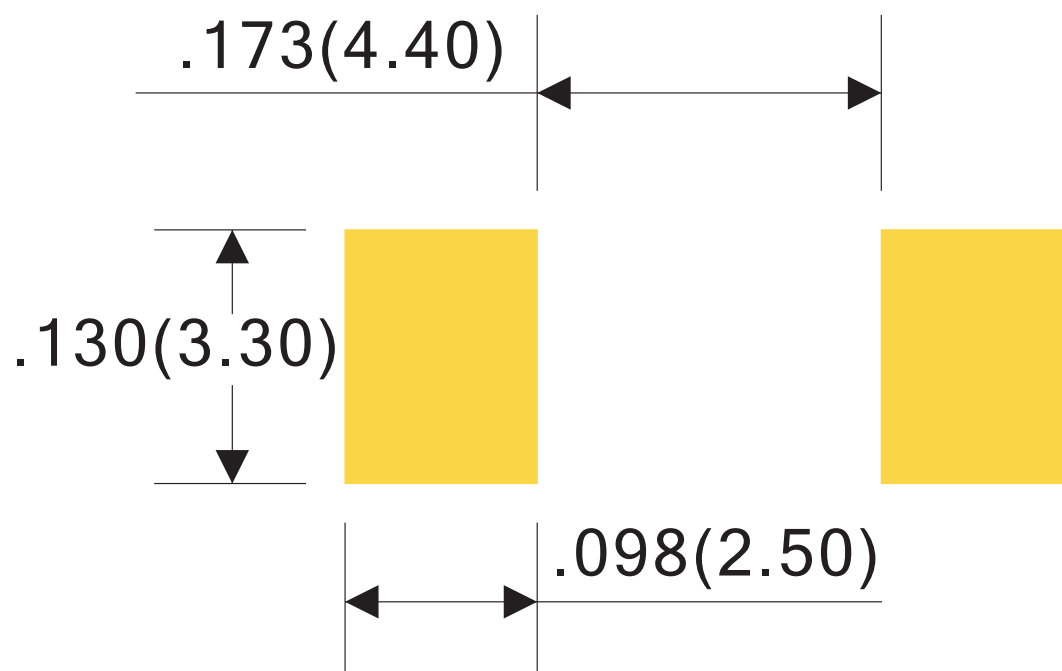
Dimensions in inches and (millimeters)

Rev.C



Suggested Soldering Pad Layout

SMC



Dimensions in inches and (millimeters)

RevA

Ordering Information:

Device PN	Packing
Part Number -T ⁽¹⁾ G ⁽²⁾ -WS ⁽³⁾	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

(3) WS : Willas brand abbreviation, Label Type does not display

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