

PRIMARY CHARACTERISTICS	
P_D	1W
V_{RRM}	50V,100V,200V,400V 600V,800V,1000V
I_O	1.0A
V_F	1.1V
$T_{J,Max}$	150°C

FEATURES

- Glass passivated device
- Ideal for surface mounted applications
- Low leakage current
- Metallurgically bonded construction
- Moisture Sensitivity Level 1

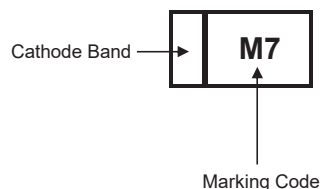
SMA(DO-214AC) PACKAGE

- **Body Marking : Mx**

x: 1~7

Ex : M7

Marking : M7



MECHANICAL DATA

- Case : Molded plastic
SMA(DO-214AC)
- 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 or inductive load. For capacitive load, derate current by 20%

RATINGS	SYMBOL	M1	M2	M3	M4	M5	M6	M7	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Current at TA = 75°C	I _O	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on	I _{FSM}	30							Amps
Typical Thermal Resistance (Note 2)	R _{θJC}	50.0							°C/W
	R _{θJA}	85.0							
Typical Junction Capacitance (Note 1)	C _J	15.0							pF
Operating Temperature Range	T _J	-55 ~ +150							°C
Storage Temperature Range	T _{STG}	-55 ~ +150							°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	M1	M2	M3	M4	M5	M6	M7	UNITS
Maximum Forward Voltage at 1.0A DC		V _F	1.1							Volts
Maximum Full Load Reverse Current Average, Full Cycle at TC=75°C		I _R	30							uAmps
Maximum DC Average Reverse Current at Rated DC Blocking Voltage	@TA = 25°C		5.0							uAmps
	@TA = 125°C		50							uAmps

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.



RATING AND CHARACTERISTIC CURVES

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

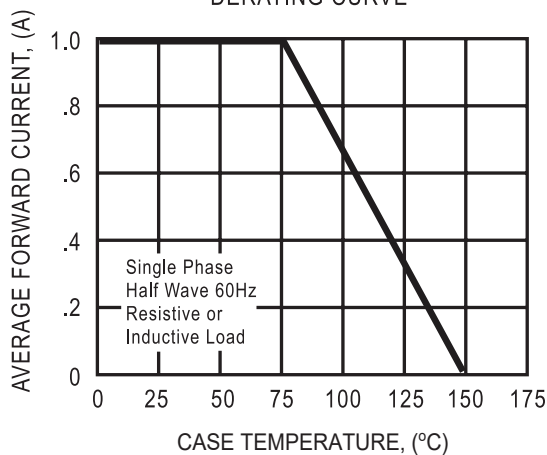


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

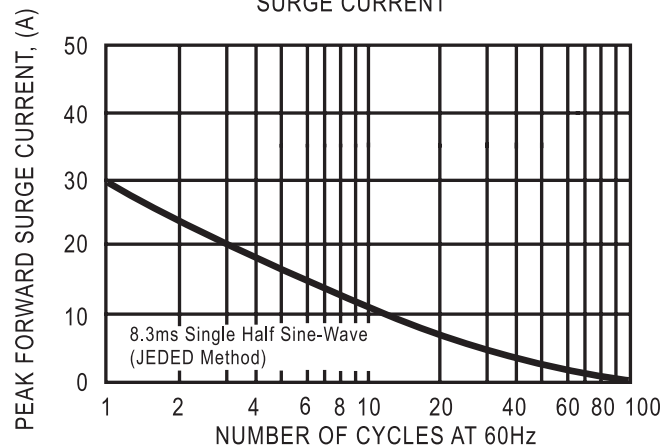


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

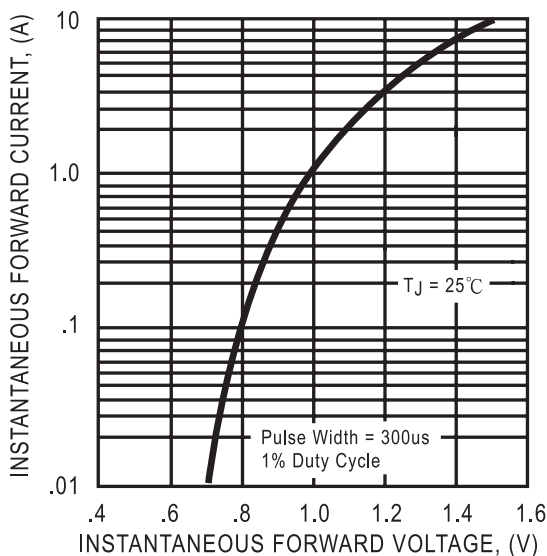


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

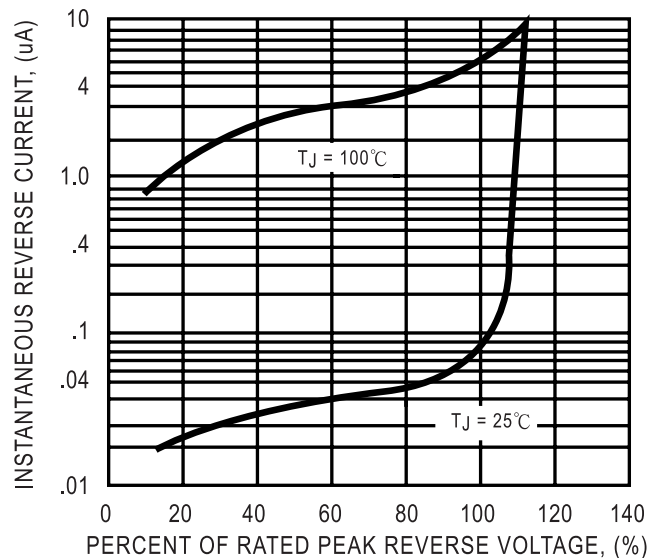
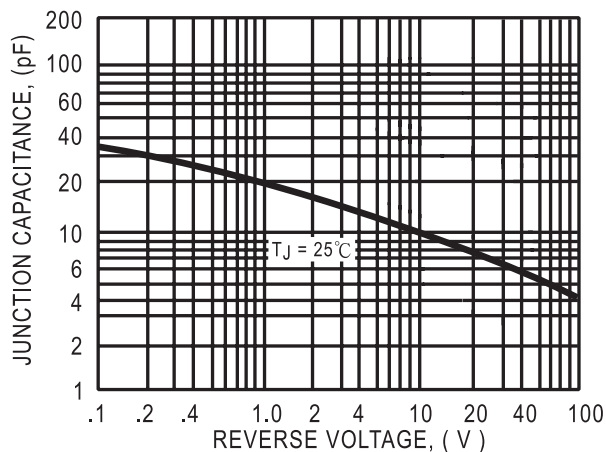


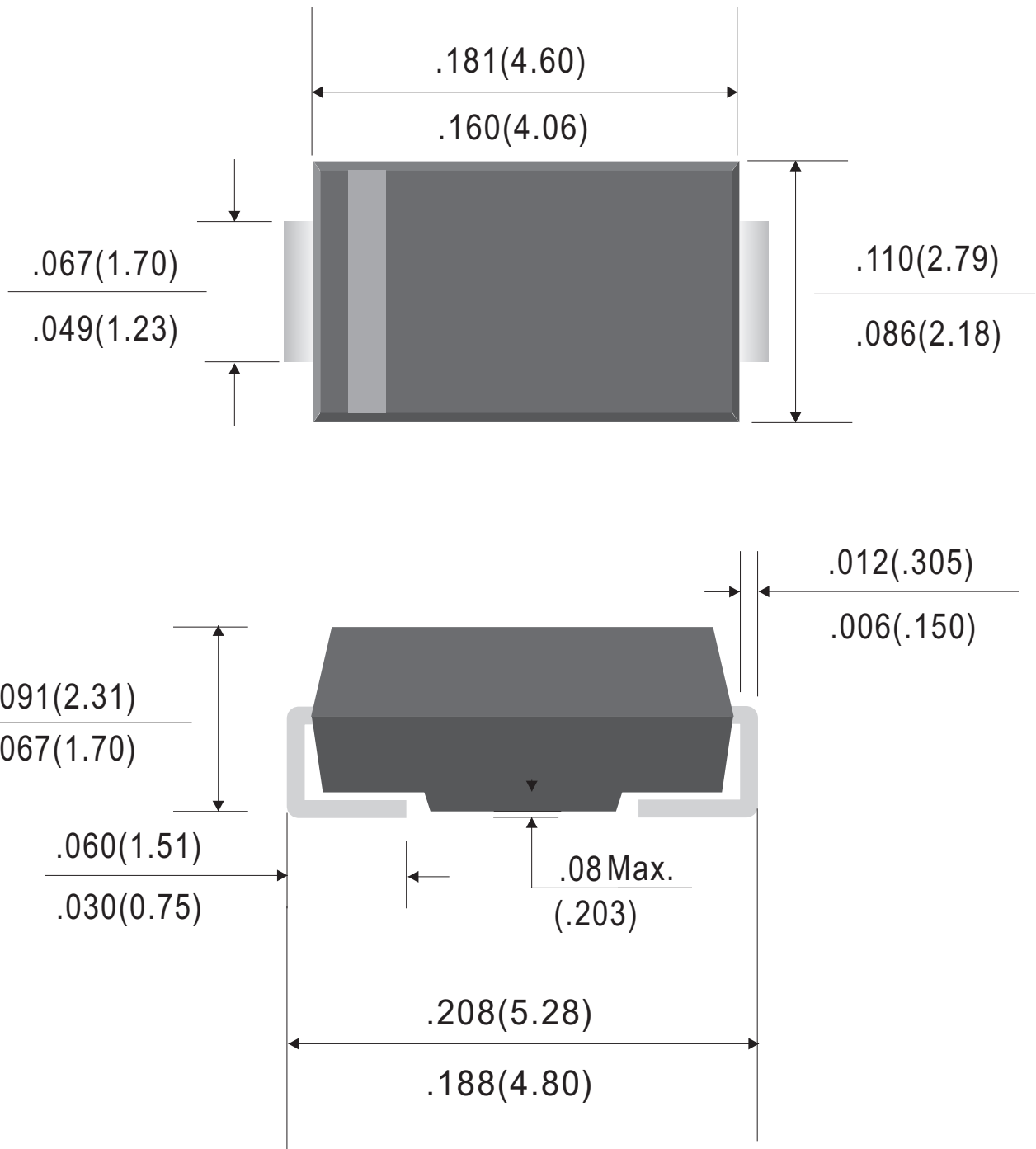
FIG. 5 - TYPICAL JUNCTION CAPACITANCE





Outline Drawing

SMA(DO-214AC)



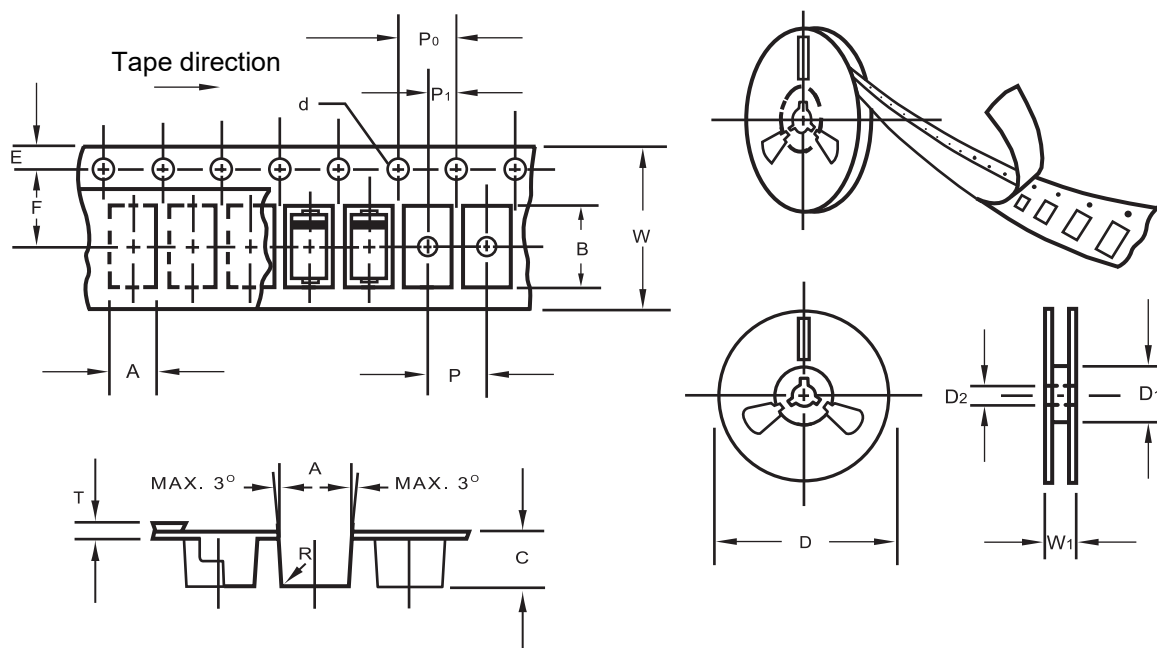
Dimensions in inches and (millimeters)

Rev.D

Suggested Soldering Pad Layout	SMA
Diagram illustrating the suggested soldering pad layout for SMA connector. The layout shows two yellow squares representing the soldering pads. The dimensions are specified in inches and millimeters (in parentheses): - Pad Width: .098 (2.50) inches - Pad Height: .085 (2.16) inches - Distance between pads: .059 (1.50) inches	
Dimensions in inches and (millimeters)	

Reel Packing

PACKAGE	PER REEL EA	REEL DIA (m/m)	BOX SIZE (m/m)	PER BOX EA	CARTION (m/m)	PER CARTION EA	GROSS WEIGHT (Kg)
SMA-P	5,000	330	335*335*40	10,000	355*360*350	80,000	15.0
SMA	5,000	280	290*290*40	10,000	270*310*310	80,000	15.0



ITEM	SYMBOL	DO214AC (SMA) mm(inch)	DO214AA (SMB) mm(inch)	DO214AB (SMC) mm(inch)
Carrier width	A	3.0 ± 0.1 (.122 ± .004)	3.65 ± 0.1 (.148 ± .004)	6.0 ± 0.1 (.240 ± .004)
Carrier length	B	5.4 ± 0.1 (.213 ± .004)	5.69 ± 0.1 (.224 ± .004)	8.30 ± 0.1 (.330 ± .004)
Carrier depth	C	2.4 ± 0.1 (.098 ± .004)	2.67 ± 0.1 (.105 ± .004)	2.5 ± 0.1 (.100 ± .004)
Sprocket hole	d	1.5 ± 0.1 (.059 ± .004)	1.5 ± 0.1 (.059 ± .004)	1.5 ± 0.1 (.059 ± .004)
Reel outside diameter	D	330 ± 5.0 (13 ± 0.20)	330 ± 5.0 (13 ± 0.20)	330 ± 5.0 (13 ± 0.20)
Reel inner diameter	D1	8.0 ± 0.2 (3.15 ± .008)	8.0 ± 0.2 (3.15 ± .008)	8.0 ± 0.2 (3.15 ± .008)
Feed hole diameter	D2	13 ± 0.5 (.152 ± .020)	13 ± 0.5 (.152 ± .020)	13 ± 0.5 (.152 ± .020)
Sprocket hole position	E	1.5 ± 0.1 (.059 ± .004)	1.5 ± 0.1 (.059 ± .004)	1.5 ± 0.1 (.059 ± .004)
Punch hole position	F	5.65 ± 0.05 (.222 ± .002)	5.65 ± 0.05 (.222 ± .002)	7.65 ± 0.05 (.301 ± .002)
Punch hole pitch	P	4.0 ± 0.1 (.157 ± .004)	8.0 ± 0.1 (.315 ± .004)	8.0 ± 0.1 (.315 ± .004)
Sprocket hole pitch	P0	4.0 ± 0.1 (.157 ± .004)	4.0 ± 0.1 (.157 ± .004)	4.0 ± 0.1 (.157 ± .004)
Embossment center	P1	2.0 ± 0.1 (.79 ± .004)	2.0 ± 0.1 (.79 ± .004)	4.0 ± 0.1 (.157 ± .004)
Totall tape thickness	T	0.30 ± .05 (.012 ± .002)	0.6 MAX.	0.6 MAX.
Tape width	W	12.0 ± 0.2 (.472 ± .008)	12.0 ± 0.2 (.472 ± .008)	16.0 ± 0.2 (.630 ± .008)
Reel with	W1	16.8 ± 2.0 (.661 ± .079)	16.8 ± 2.0 (.661 ± .079)	24.0 ± 2.0 (.945 ± .079)

NOTE: Devices are packed in accordance with EIA standard RS-481-A and specification given above.

Ordering Information:

Device PN	Packing
Part Number -T ⁽¹⁾ G ⁽²⁾ -WS ⁽³⁾	Tape & Reel Packing :5000pcs/Reel

Note: 1. Packing code, T: Tape & 13" Reel Packing;

2. RoHS product for packing code suffix "G", Halogen free product for packing code suffix "H".

3. Willas brand abbreviation, label type does not display

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