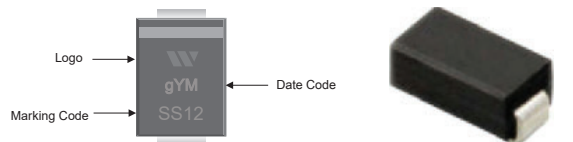


1.0 AMP Surface Mount Schottky Barrier Rectifier-20V- 200V
PRIMARY CHARACTERISTICS

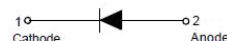
V_{RRM}	20V~200V
I_O	1.0A
V_F	0.5V, 0.7V, 0.85V, 0.9, 0.92
$T_{J,Max}$	125°C

**SCHEMATIC DIAGRAM
SMA(DO-214AC) PACKAGE**

Marking Code : Part Number
Ex : SS12



g:Product Lines
Y:1-digit BC year code, 3-2023,4-2024...etc
M:Month, EX : 1-1,2-2,...10-O,11-N,12-D


FEATURES

- Ideal for surface mounted applications
- Low leakage current
- Metallurgically bonded construction
- High reliability
- MSL1

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 of inductive load.

For capacitive load, derate current by 20%

RATINGS	SYMBOL	SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS115	SS120	UNIT
Marking Code		SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS115	SS120	
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	VRMS	14	21	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current	Io	1.0									Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30.0									Amps
Typical Thermal Resistance	RθJA	70									°C/W
	RθJC	30									°C/W
Typical Junction Capacitance (Note 1)	CJ	70			60		50		110		pF
Operating Temperature Range	TJ	-55 to +125									°C
Storage Temperature Range	TSTG	-55 to +150									°C

CHARACTERISTICS		SYMBOL	SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS115	SS120	UNIT
Maximum Forward Voltage at 1.0A DC	@TA=25°C	V _F	0.50			0.70		0.85		0.90	0.92	Volts
Maximum Average Reverse Current at	@TA=25°C	I _R	0.5					0.2				mAmps
Rated DC Blocking Voltage	@TA=100°C		10.0					5.0				

Note : 1.Measured at 1 MHz and applied reverse voltage of 4.0 volts.

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

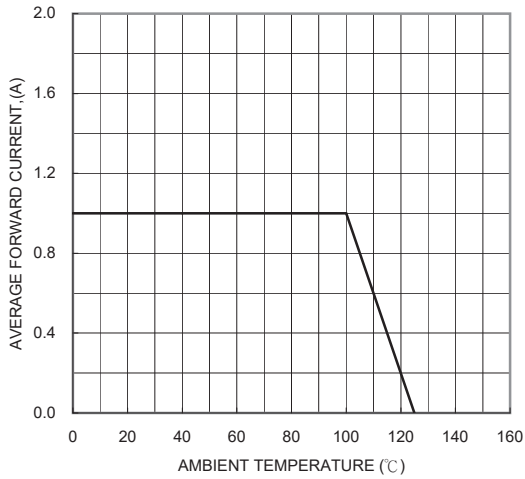


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

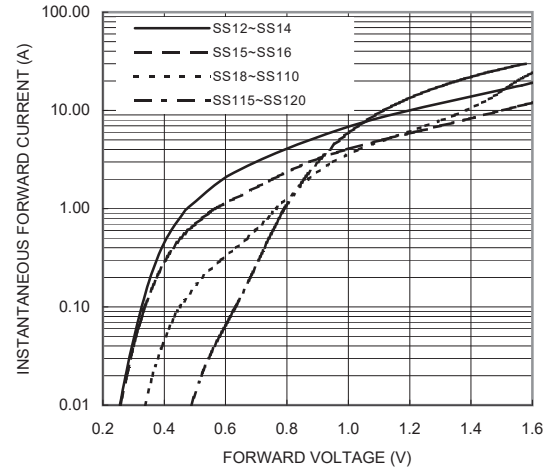


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

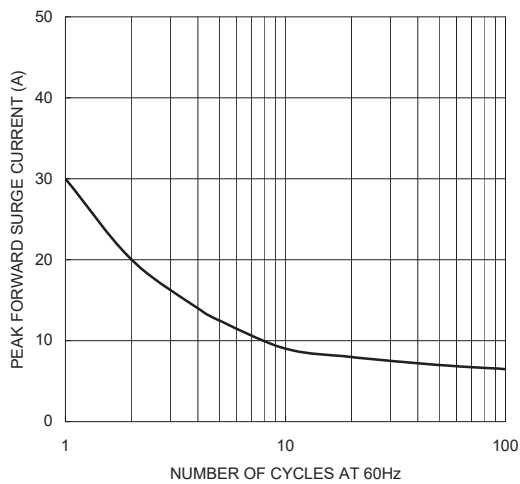


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

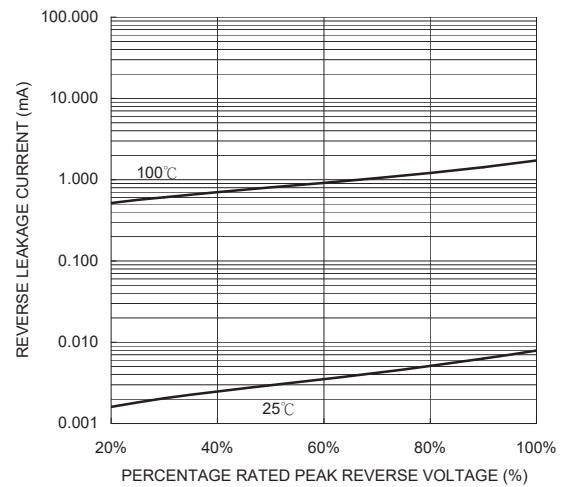
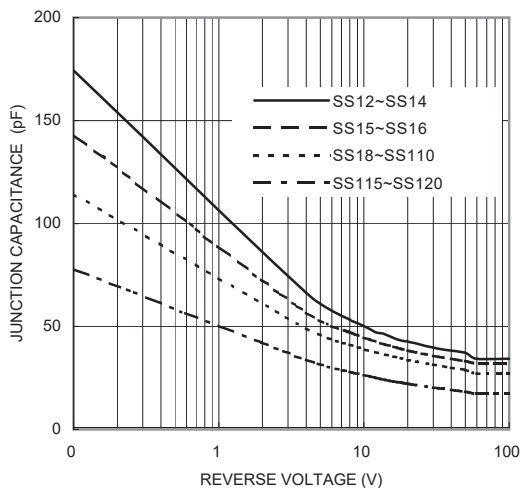


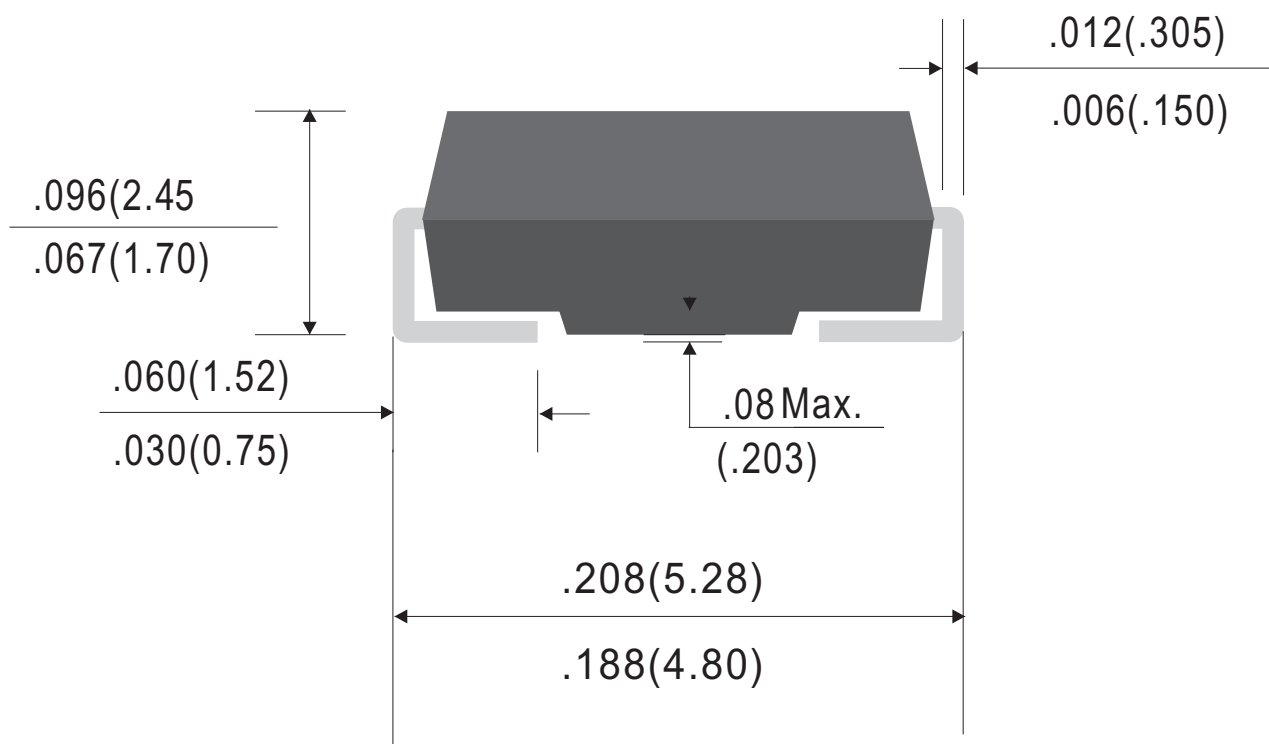
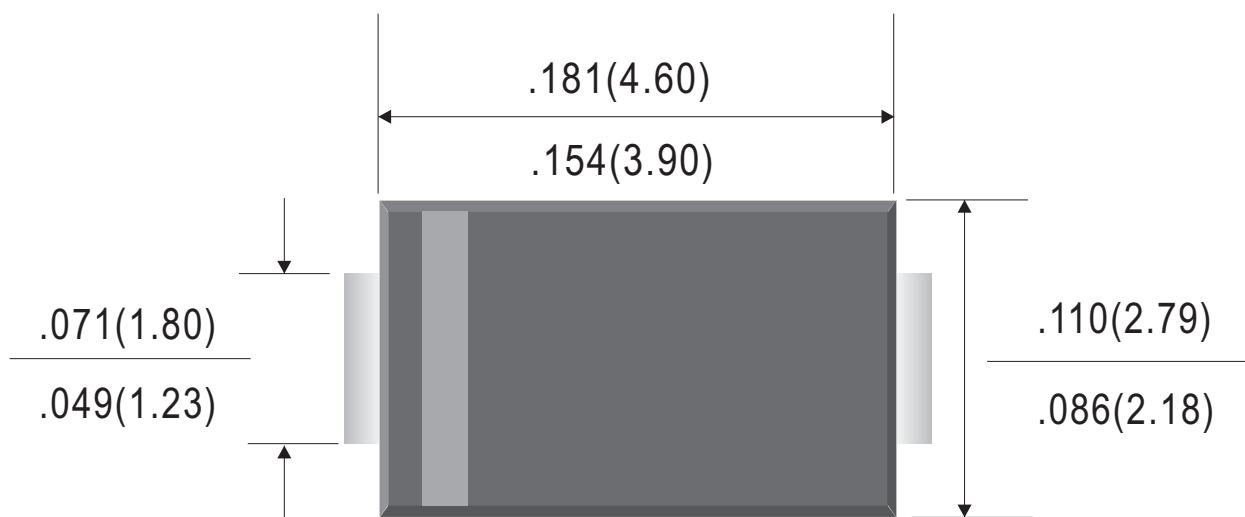
FIG. 5-TYPICAL JUNCTION CAPACITANCE





Outline Drawing

SMA(DO-214AC)



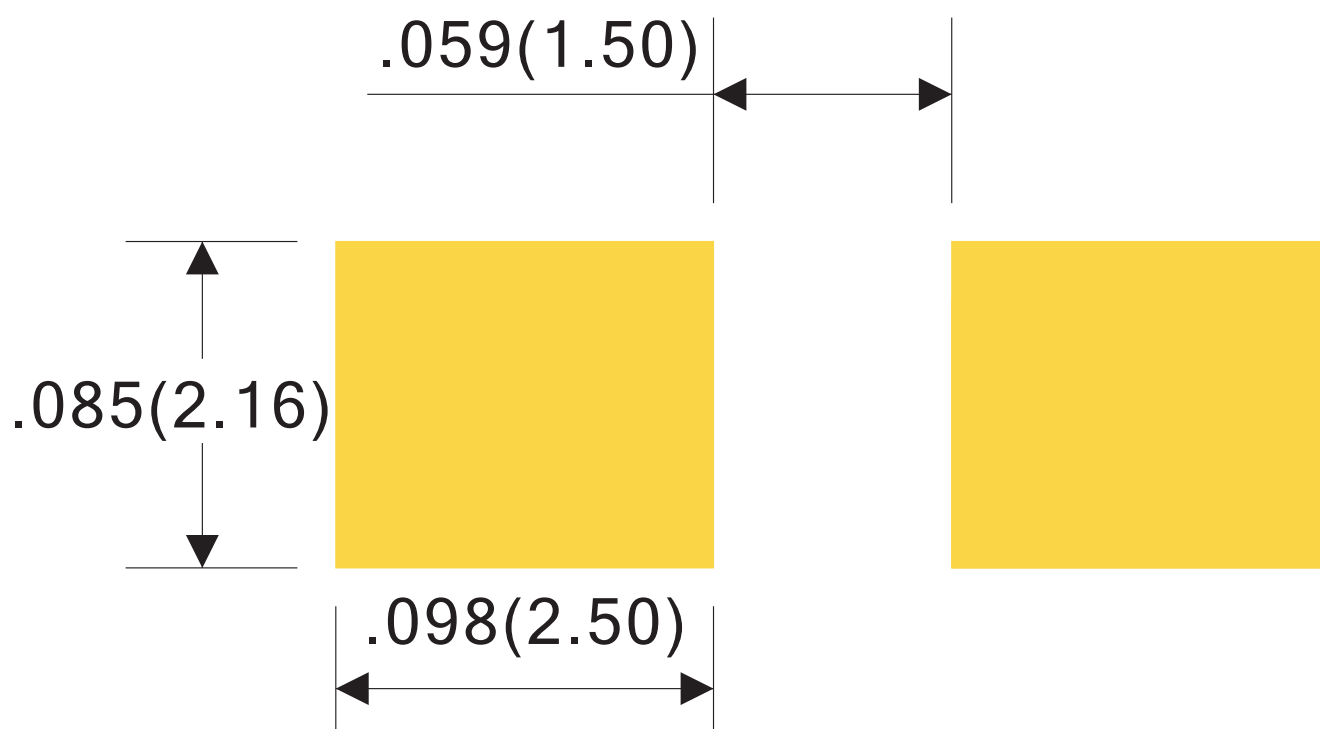
Dimensions in inches and (millimeters)

Rev.D



Suggested Soldering Pad Layout

SMA(DO-214AC)



Dimensions in inches and (millimeters)

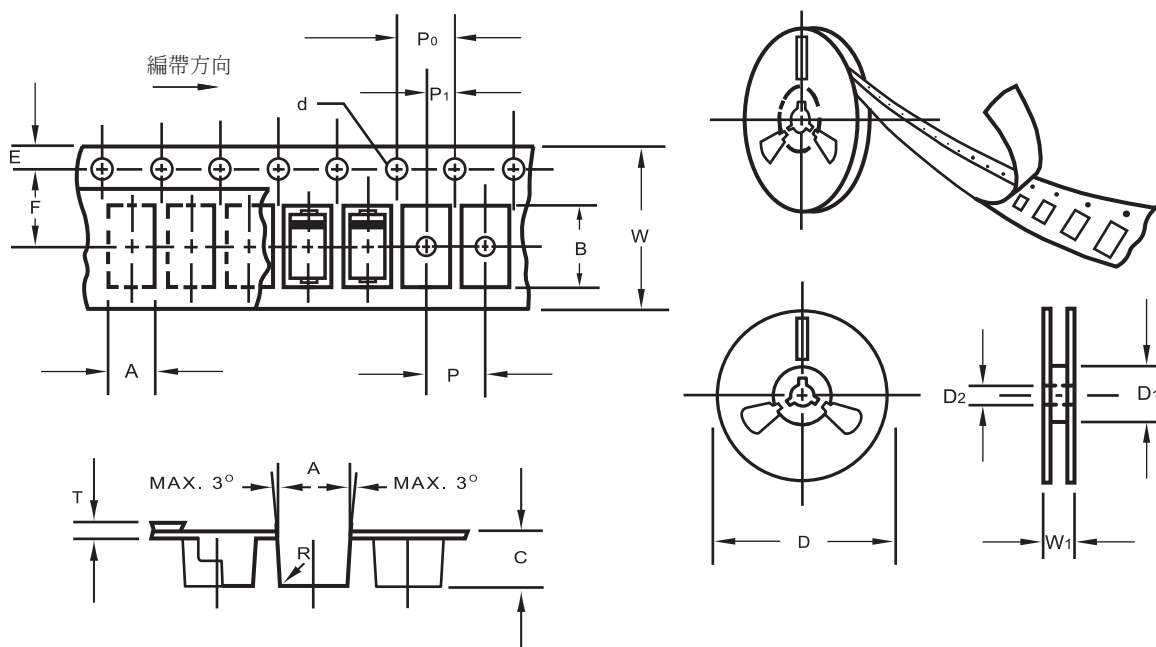
RevA

Reel Taping Sepecification - Surface Mount Device

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	5,000	330	340*340*40	10,000	355*360*350	80,000	15.0
SMB	3,000	330	340*340*40	6,000	355*360*350	48,000	13.6
SMC	3,000	330	340*340*40	6,000	355*360*350	48,000	18.5

Note. Packing tape color : It's contains colorless & Black.



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)
Stroker 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	Marking ⁽⁴⁾	Packing
Part Number-T ⁽¹⁾ H ⁽²⁾ -WS ⁽³⁾	See Page 1 Table	Tape&Reel: 5 Kpcs/Reel

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

(2) Packing code suffix "G" for RoHS product : Packing code Suffix "H" for halogen free product All materials and products supplied comply with the U.S. Toxic Substances Control Act statement, PBT Chemicals.

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

(4) There may be additional marking, which relates to the lot trace code information (data code and vendor code), the logo or the environmental category on the device.

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