

PRIMARY CHARACTERISTICS	
P_D	2.25W
V_{RRM}	20V,30V,40V
$I_{(AV)}$	5.0A
V_F	0.45V
$T_{J,Max}$	150°C

FEATURES

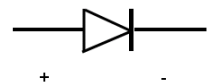
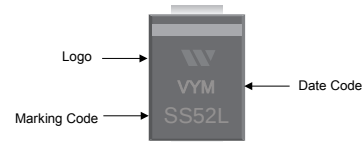
- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- Moisture Sensitivity Level 1

SMA(DO-214AC)

PACKAGE

Marking : SS52L,SS53L
SS54L

Ex : SL52-A



V:Product Lines
Y:2-digit BC year code, 4-2014,5-2015 etc
M:Month, EX : 1-1,2-2,---10-O,11-N,12-D

MECHANICAL DATA

- Case : Molded plastic,SMA(DO-214AC)
- Polarity : Indicated by cathode band
- 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 current derate by 20%.

CHARACTERISTICS	SYMBOL	SL52-A	SL53-A	SL54-A	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Lengths	$I_{(AV)}$	5.0			A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I_{FSM}	150			A
Maximum Forward Voltage at 5.0A DC	V_F	0.45			V
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =100°C	I_R	1.0 50			mA
Typical Junction Capacitance (Note1)	C_J	500			pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	15			°C/W
Operating Temperature Range	T_J	-55 to +150			°C
Storage Temperature Range	T_{STG}	-55 to +150			°C

NOTES: 1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

2.Thermal resistance junction to ambient,



RATING AND CHARACTERISTIC CURVES SL52-A~SL54-A

FIG. 1 – FORWARD CURRENT DERATING CURVE

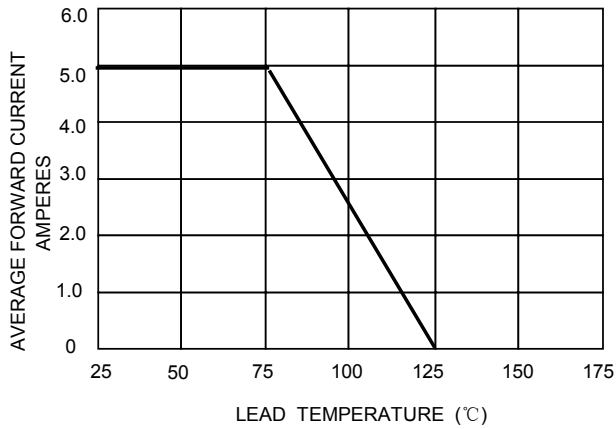


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

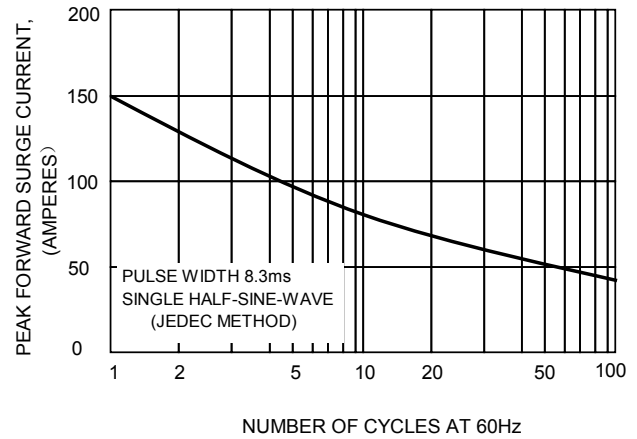


FIG.3 – TYPICAL JUNCTION CAPACITANCE

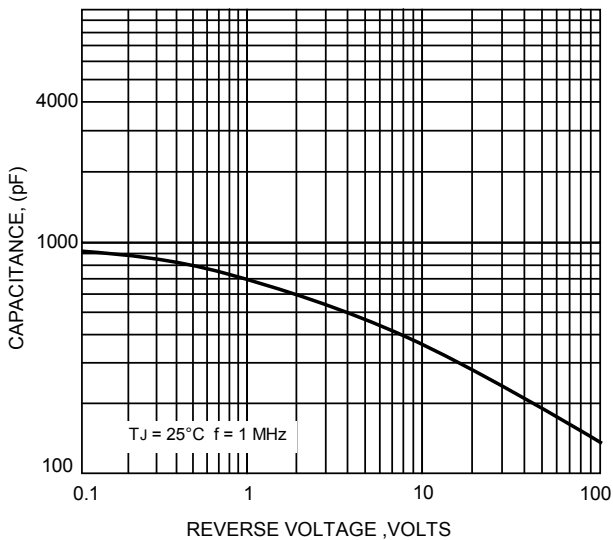


FIG.4-TYPICAL FORWARD CHARACTERISTICS

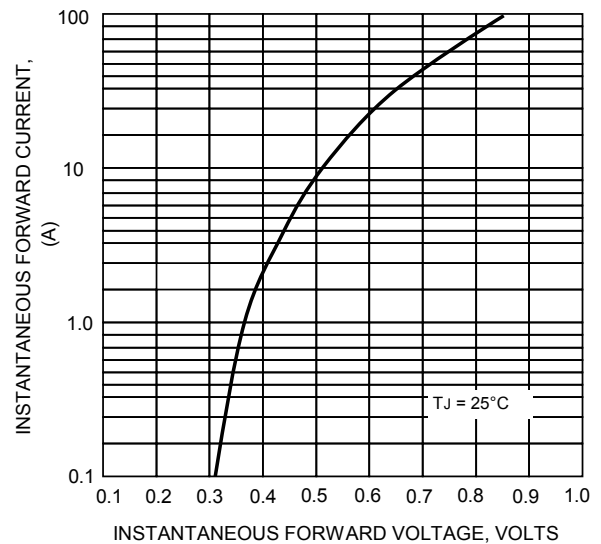
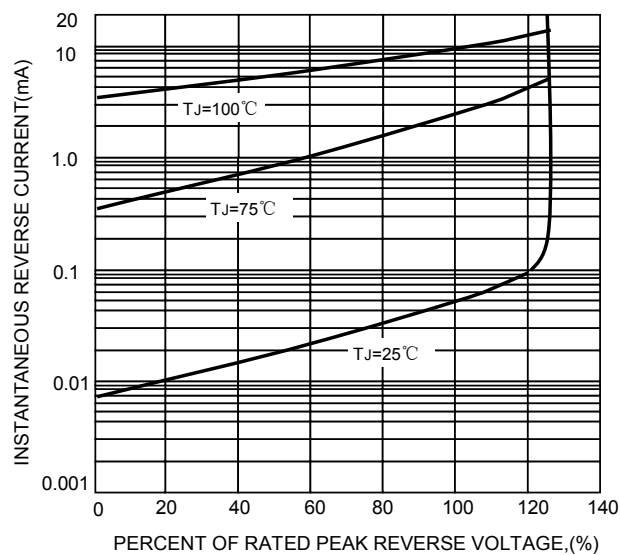
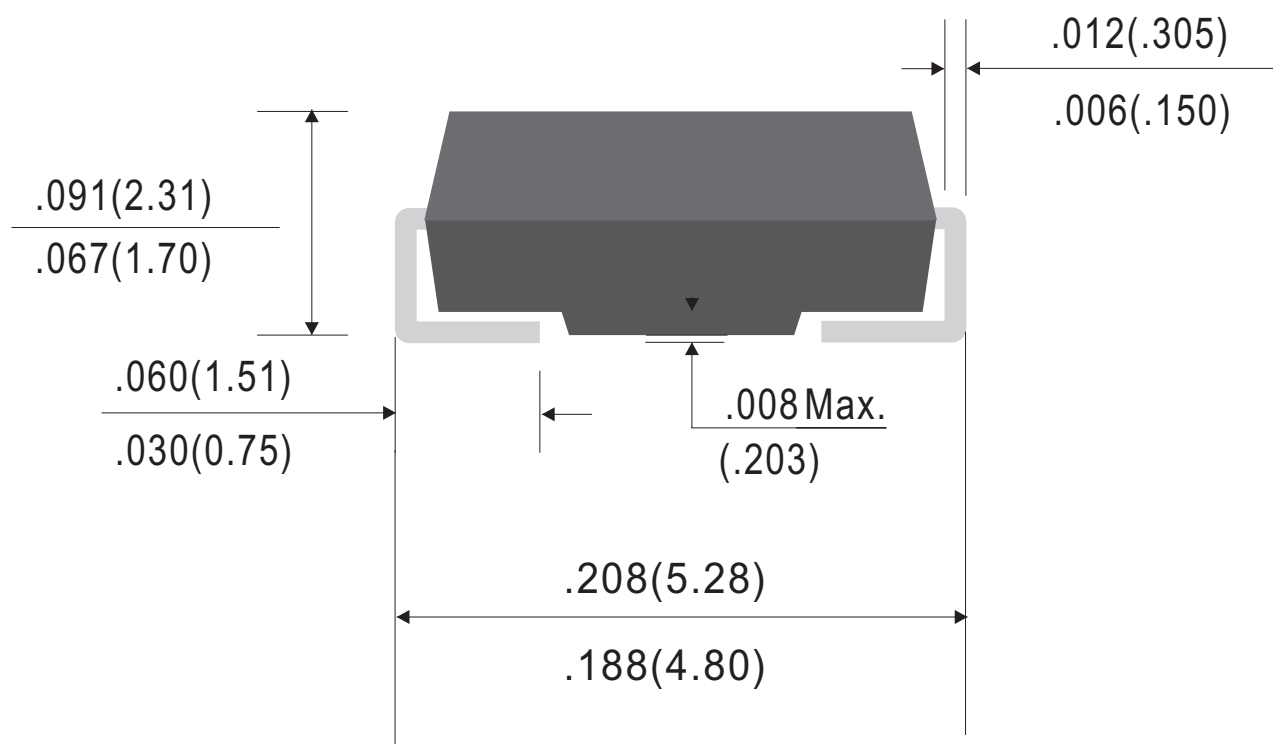
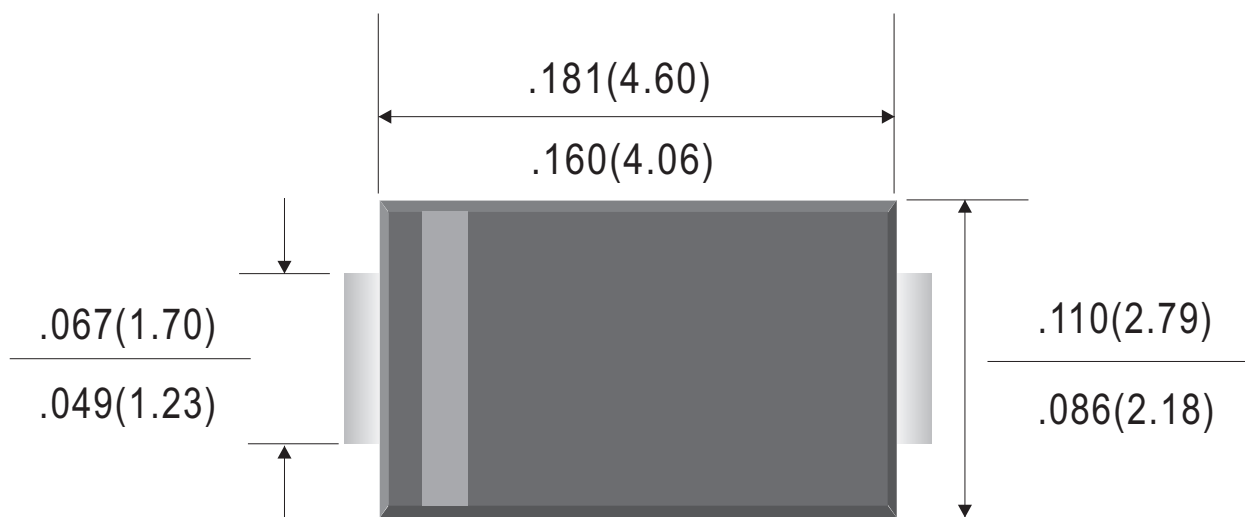


FIG.2-TYPICAL REVER CHARACTERISTICS



Outline Drawing

SMA(DO-214AC)



Dimensions in inches and (millimeters)

Rev.C

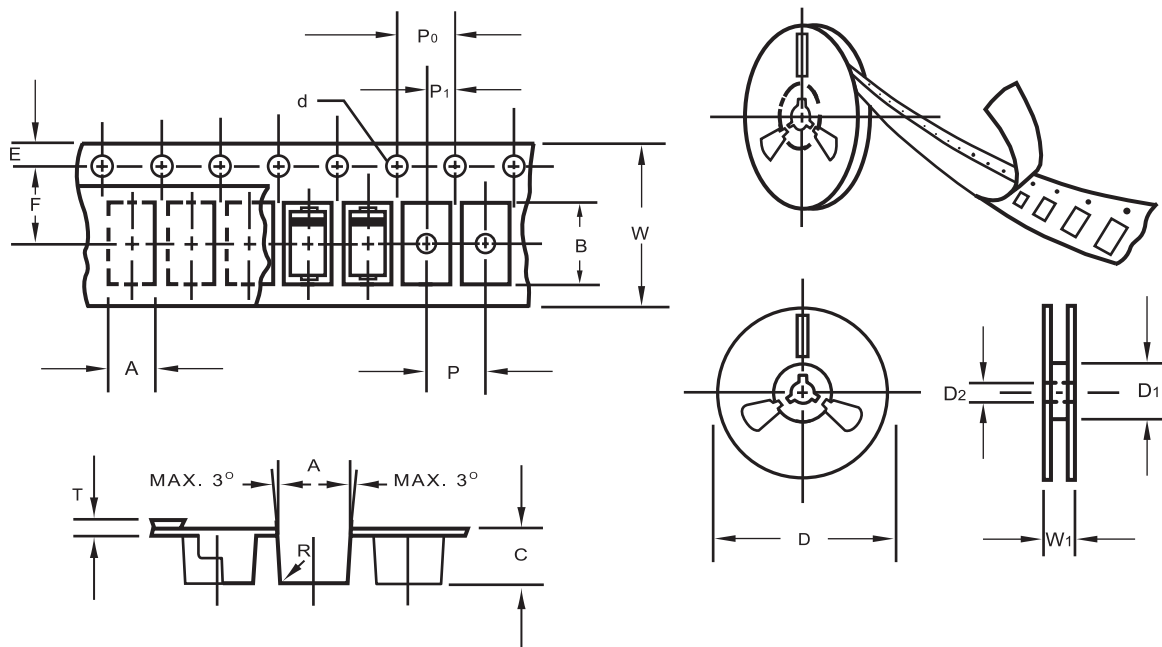
Rev.A

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	178 ± 2.0 (7.0 ± .79)	178 ± 2.0 (7.0 ± .79)	178 ± 2.0 (7.0 ± .79)
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	Tape&Reel: 5 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"

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