



SS32A THRU SS320A

VOLTAGE RANGE	20 to 200 Volts
CURRENT	3.0 Ampere

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 260 C/10 seconds at terminals



DO-214AC (SMA)

Mechanical Data

- Case: Transfer molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead :Solder plated, solderable per MIL-STD-750 method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.002 ounce, 0.064 gram

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%

TYPE NUMBER		SYMBOL S	SS 32A	SS 34A	SS 35A	SS 36A	SS 38A	SS 310A	SS 315A	SS 320A	UNIT
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	20	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage		V _{RMS}	14	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage		V _{DC}	20	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current at T _L see figure 1 T _L =100°C		I _(AV)	3.0								Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	80								Amps
Maximum Instantaneous Forward Voltage @ 3.0A(Note1)		V _F	0.55		0.70		0.85		0.90		Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element	T _A = 25°C	I _R	0.1						0.01		mA
	T _A = 100°C		20.0				10.0		2.0		
Typical Thermal Resistance (Note 2)		R _{θJA}	55								°C/W
		R _{θJL}	25								
Diode junction capacitance (Note 3)		C _J	300		200						pF
Operating Junction Temperature		T _J	(-55 to +150)						(-65 to +175)		°C
Storage Temperature Range		T _{STG}	(-55 to +150)								°C

Notes:

1. Pulse test: 300 μs pulse width, 1% duty cycle.
2. Unit mounted on P.C.B. with 0.20"×0.20" (5.00mm×5.00mm) copper pads.
3. f=1MHz and applied 4V DC reverse voltage.



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Ratings and Characteristic Curves (TA=25°C unless otherwise noted)

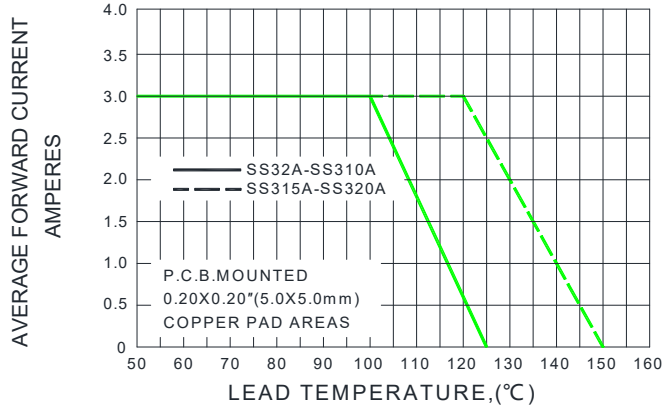
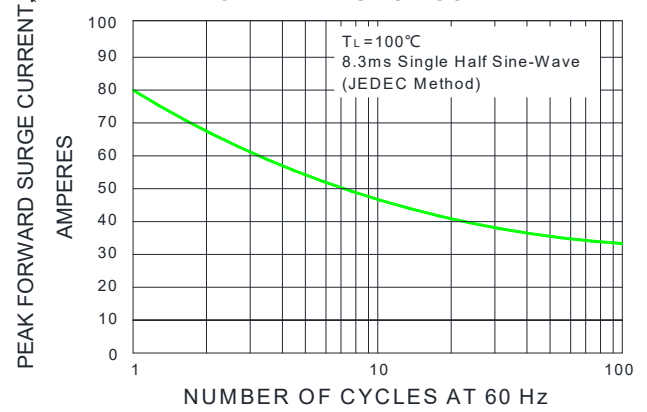
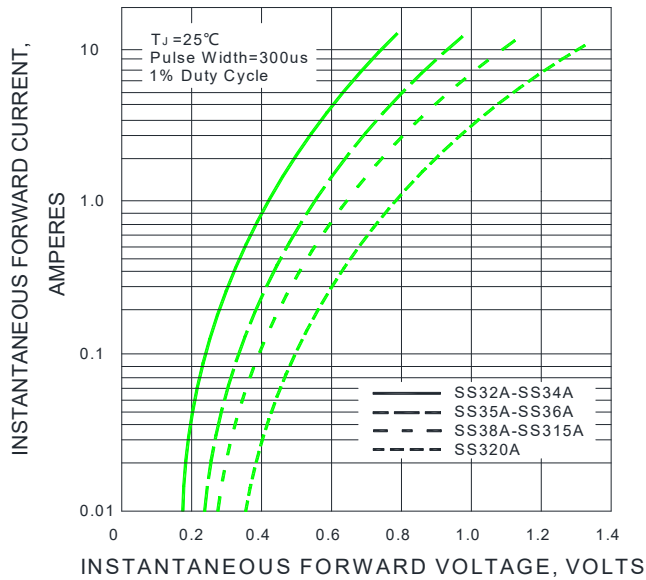
FIG.1-FORWARD CURRENT
DERATING CURVEFIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENTFIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

FIG.4-TYPICAL REVERSE CHARACTERISTICS

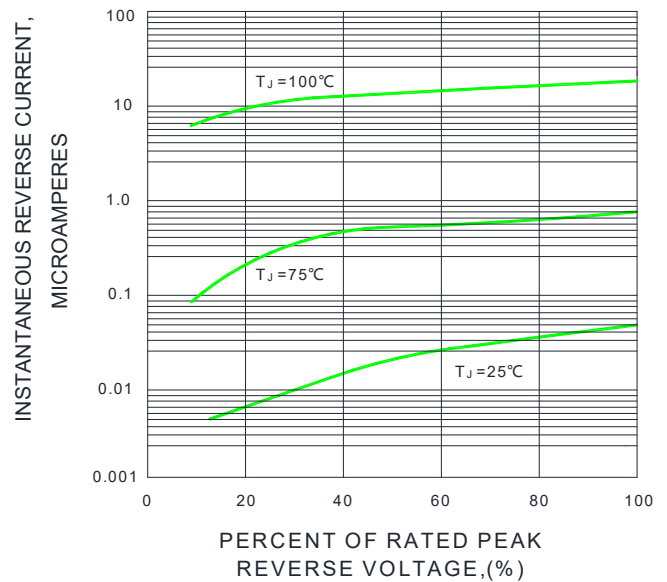
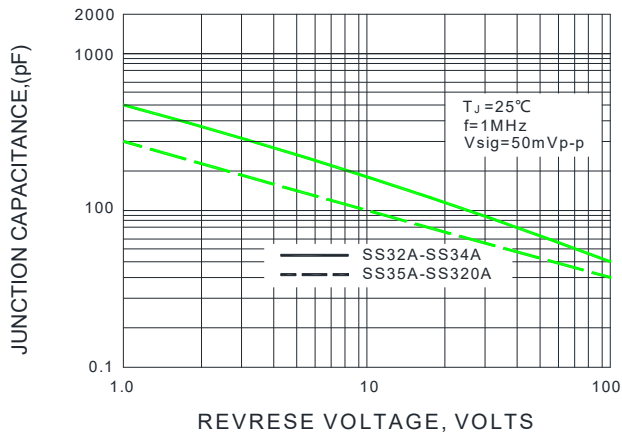


FIG.5-TYPICAL JUNCTION CAPACITANCE



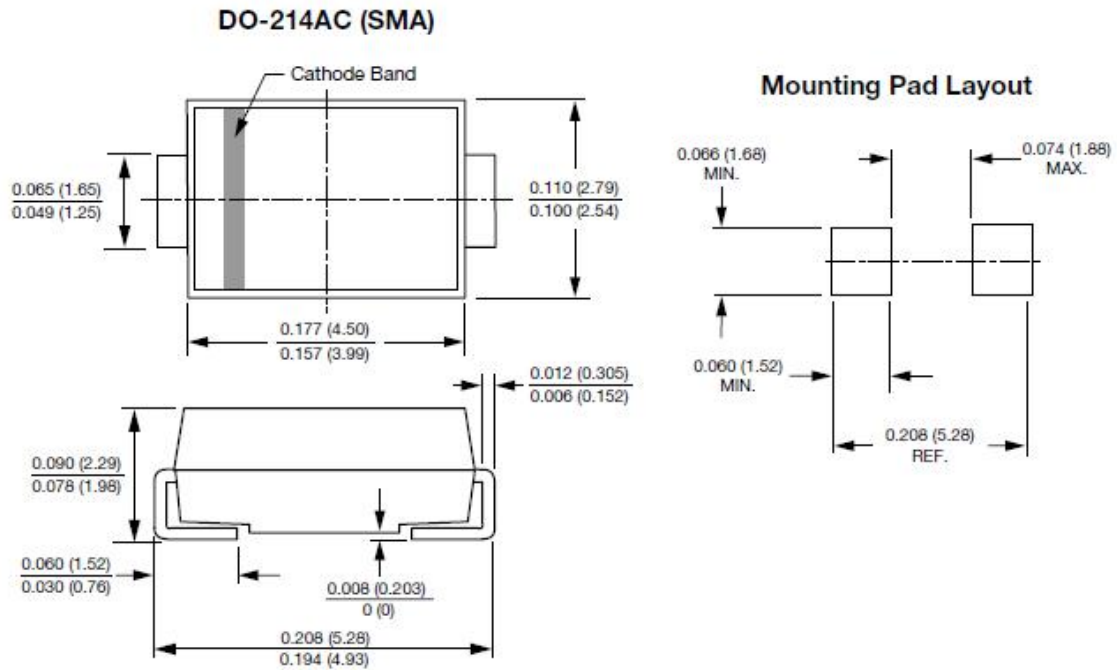


SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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Package Outline Dimensions in inches (millimeters)



Marking

Type number	Marking code
SS32A	SS320
SS34A	SS340
SS35A	SS350
SS36A	SS360
SS38A	SS380
SS310A	SS3100
SS315A	SS3150
SS320A	SS3200

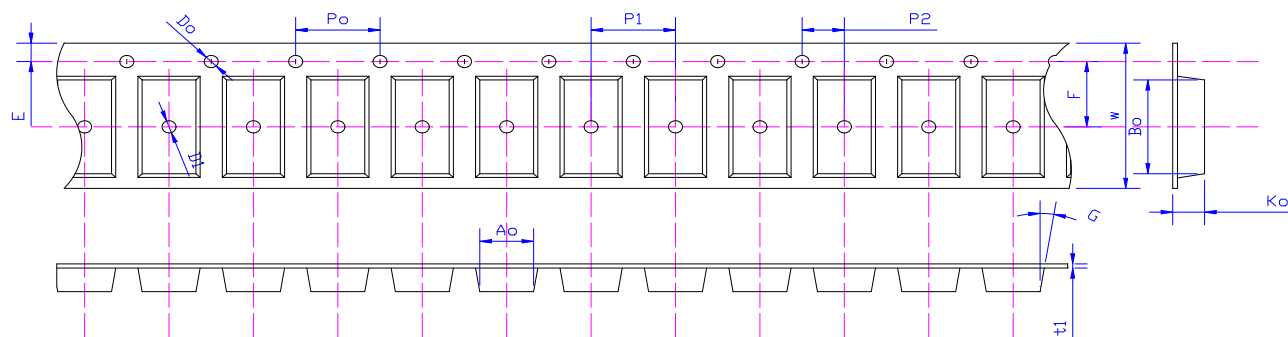


SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

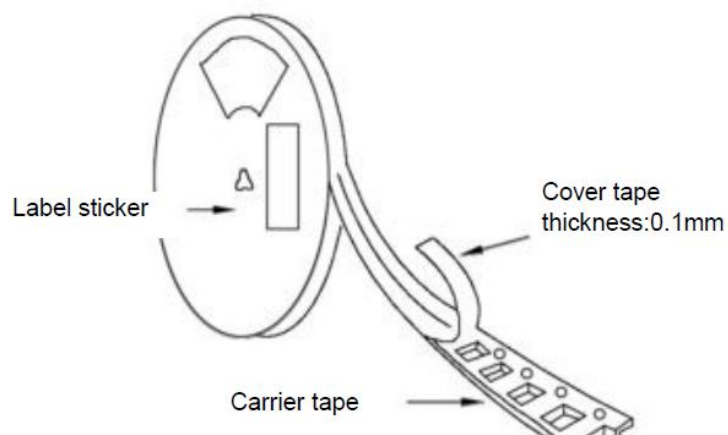
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Package Reel Information



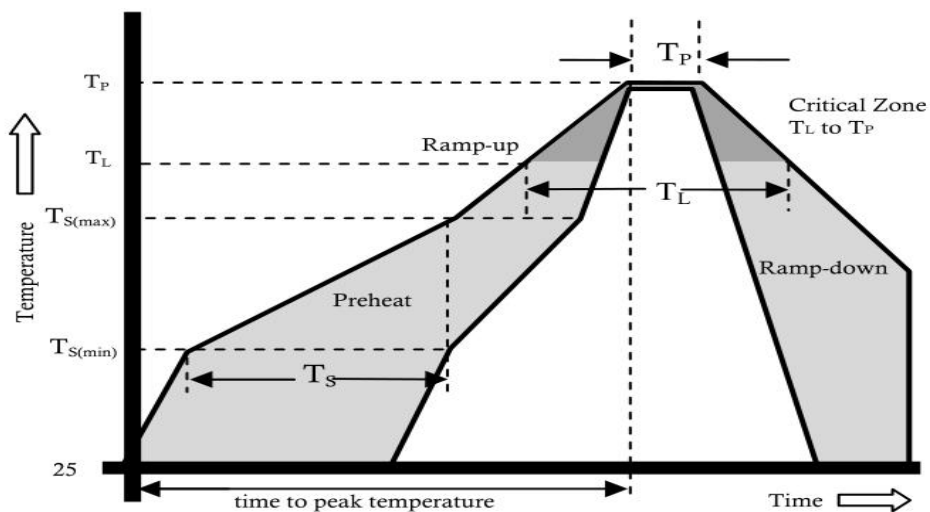
Specifications	Ao	Bo	Ko	Po	W	t1
SMA	2.55±0.10	5.10±0.10	2.36±0.10	4.00±0.1	12.0±0.05	0.23±0.02



DEVICE TYPE	Tape Width	13"Reel			07"Reel			
		Q'TY/REEL(pcs)	BOX/CARTON	Q'TY/CARTON(pcs)	Q'TY/REEL(pcs)	REEL/BOX	BOX/CARTON	Q'TY/CARTON(pcs)
SMA	12mm	5000	8	80000	1500	2	16	48000



Reflow Profile



Reflow Condition		Pb-Free Assembly
Pre Heat	Temperature Min.	+150°C
	Temperature Max.	+200°C
	Time(Min to Max)	60-180 secs.
Average ramp up rate(Liquidus Temp(T_L) to peak)		3°C/sec. Max.
$T_{S(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max.
Reflow	Temperature (T_L)(Liquidus)	+217°C
	Temperature (T_L)	60-150 secs.
Peak Temp (T_P)		+(260+0/-5) °C
Time within 5°C of actual Peak Temp (T_P)		25 secs.
Ramp-down Rate		6°C/sec. Max.
Time 25°C to peak Temp (T_P)		8 min. Max.
Do not exceed		+260°C