



SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

SS32A THRU SS320A

VOLTAGE RANGE	20 to 200 Volts
CURRENT	3.0 Ampere

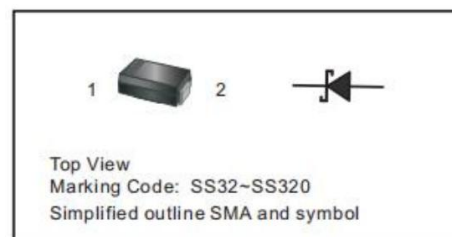


Features

- 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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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	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 = 125°C		20.0			10.0		2.0			
Typical Thermal Resistance ^(Note 2)		R _{BJA}	55								°C/W
		R _{BJL}	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: 300μs 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.



SS32A THRU SS320A

VOLTAGE RANGE 20 to 200 Volts
CURRENT 3.0 Ampere

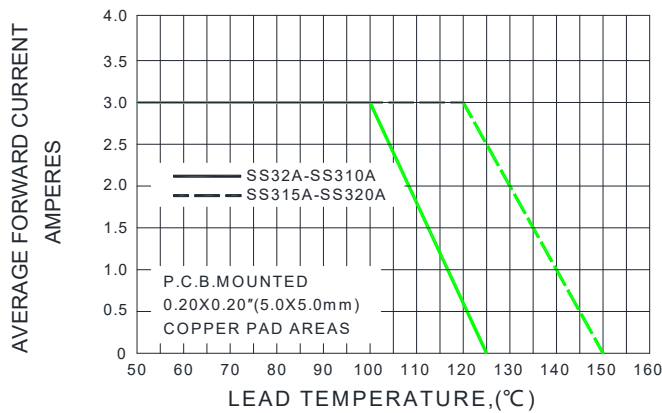
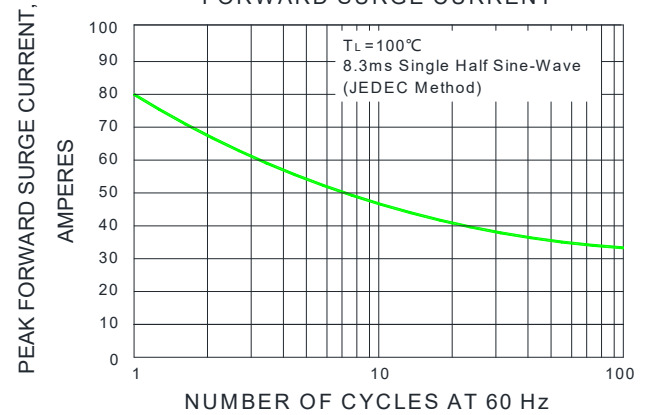
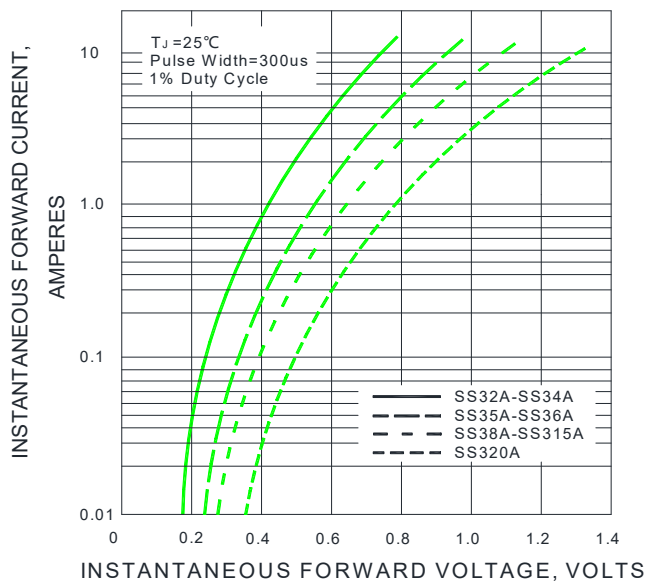
Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)FIG.1-FORWARD CURRENT
DERATING CURVEFIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENTFIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

FIG.4-TYPICAL REVERSE CHARACTERISTICS

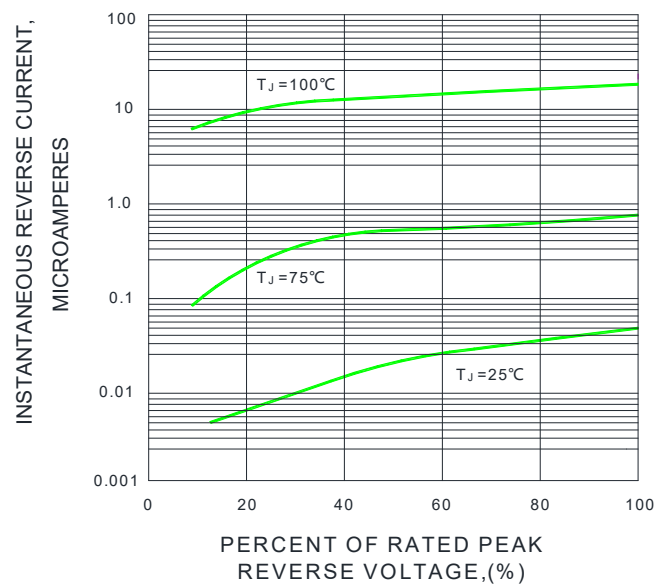
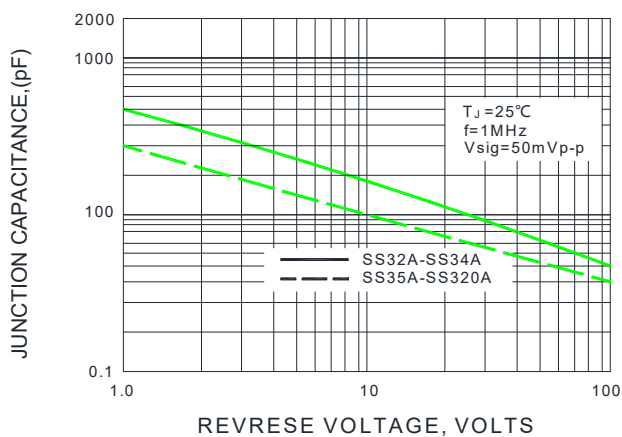


FIG.5-TYPICAL JUNCTION CAPACITANCE



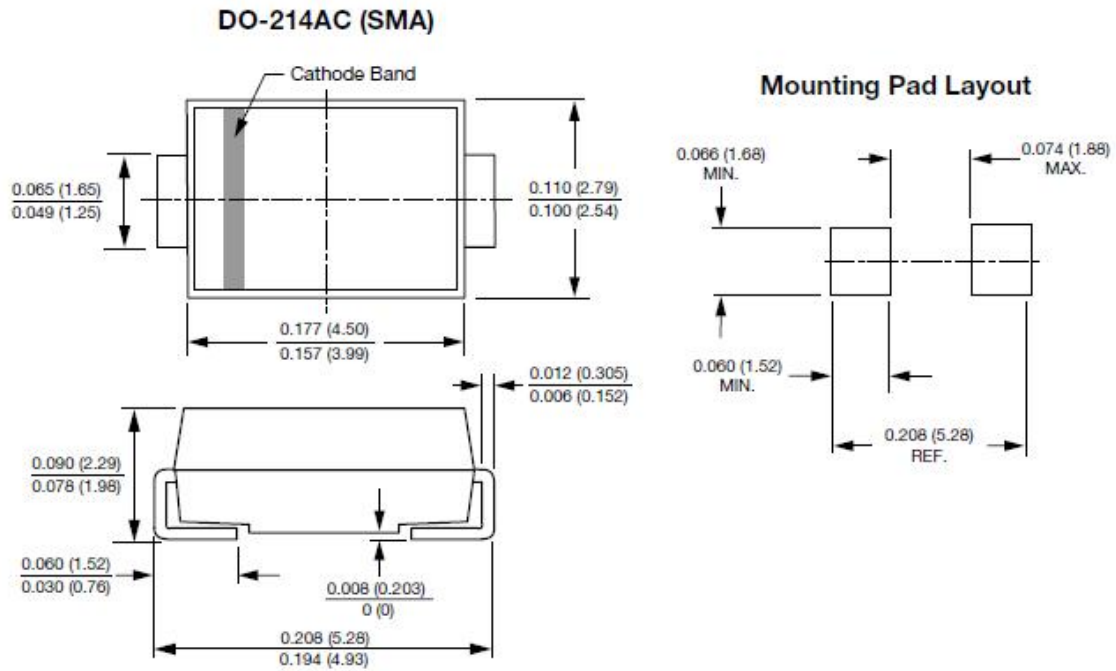


SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

SS32A THRU SS320A

VOLTAGE RANGE	20 to 200 Volts
CURRENT	3.0 Ampere

Package Outline Dimensions in inches (millimeters)



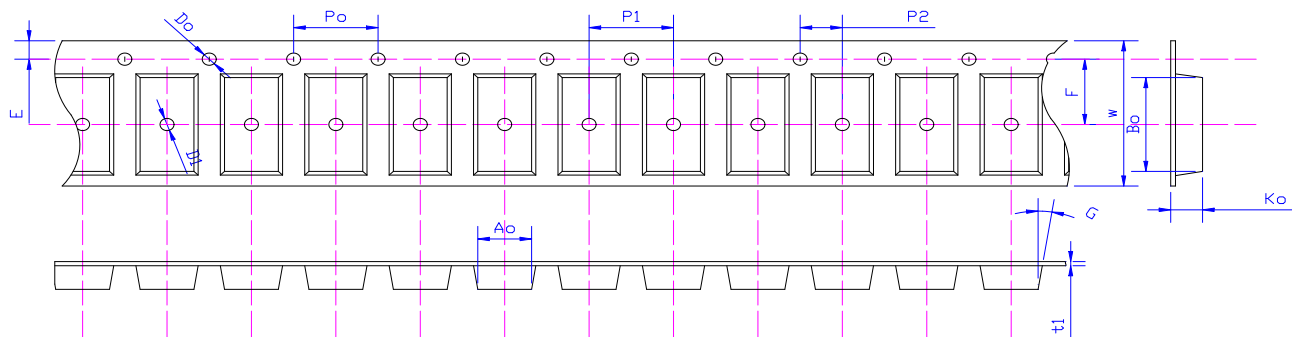


SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

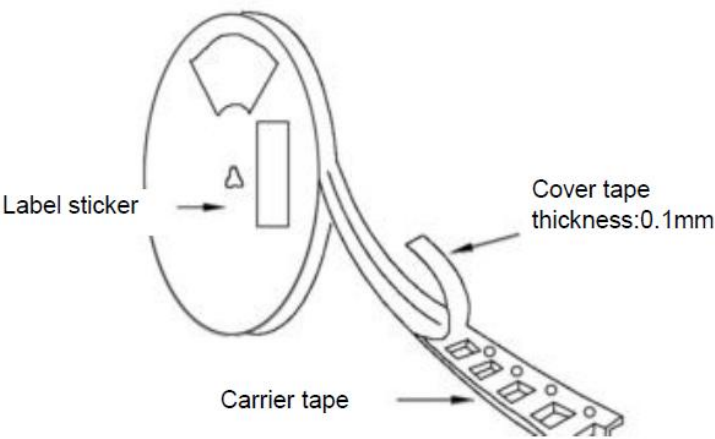
SS32A THRU SS320A

VOLTAGE RANGE	20 to 200 Volts
CURRENT	3.0 Ampere

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/CARTOON	Q'TY/CARTON (pcs)	Q'TY/REEL(pcs)	REEL/BOX	BOX/CARTOON	Q'TY/CARTON (pcs)
SMA	12mm	5000	8	80000	1500	2	16	48000

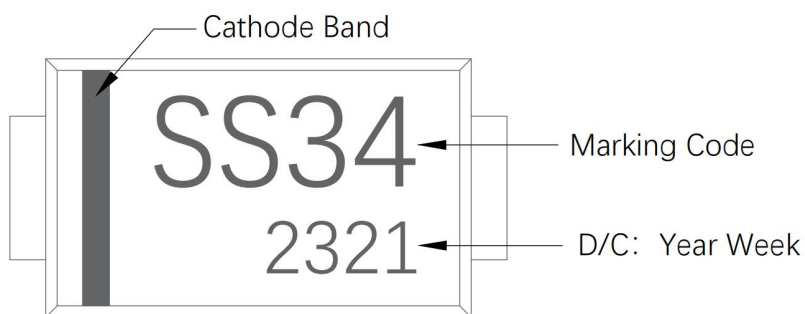


SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

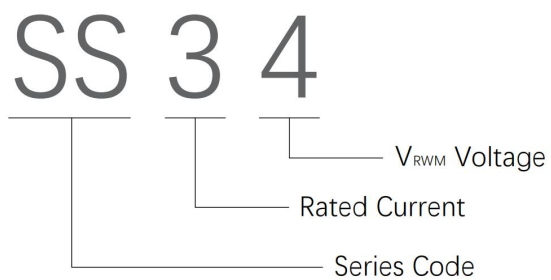
SS32A THRU SS320A

VOLTAGE RANGE	20 to 200 Volts
CURRENT	3.0 Ampere

Marking Code



Part Number Code





SS32A THRU SS320A

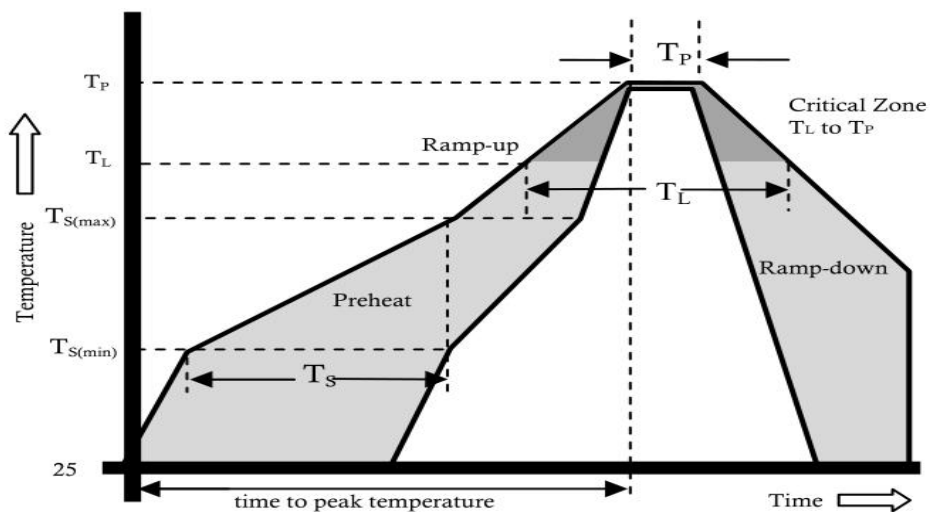
VOLTAGE RANGE

20 to 200 Volts

CURRENT

3.0 Ampere

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



SS32A THRU SS320A

VOLTAGE RANGE	20 to 200 Volts
CURRENT	3.0 Ampere

Disclaimer

The information presented in this document is for reference only. Chongqing changjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Changjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.czlangjie.com](http://www.czlangjie.com) , or consult your nearest Langjie's sales office for further assistance.