

# SS12-A THRU SS120-A

## 1.0A Surface Mount Schottky Barrier Rectifiers - 20V-200V

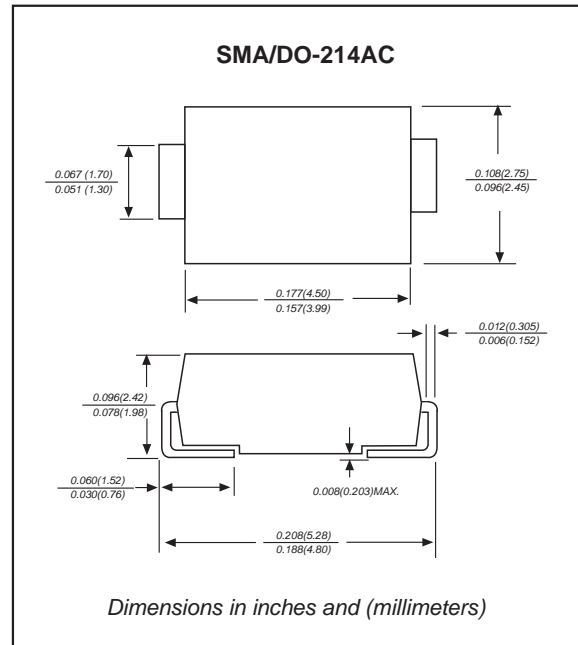
### Features

- ▶ 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: 250°C/10 seconds at terminals
- ▶ Compliant to RoHS Directive 2011/65/EU
- ▶ Suffix "-H" indicates Halogen-free part, ex. SS14-A-H

### Mechanical data

- ▶ **Case:** JEDEC DO-214AC molded plastic body
- ▶ **Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026
- ▶ **Polarity:** Color band denotes cathode end
- ▶ **Mounting Position:** Any
- ▶ **Weight:** 0.002 ounce, 0.07 grams

### Package outline



### Maximum ratings and Electrical Characteristics (AT T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.2	I <sub>O</sub>			1.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I <sub>FSM</sub>			30	A
Reverse current	V <sub>R</sub> = V <sub>RRM</sub> T <sub>A</sub> = 25°C	I <sub>R</sub>			0.5	mA
	V <sub>R</sub> = V <sub>RRM</sub> T <sub>A</sub> = 100°C				10	
Thermal resistance	Junction to ambient NOTE 1	R <sub>θJA</sub>		88		°C/W
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C <sub>J</sub>		110		pF
Storage temperature		T <sub>STG</sub>	-65		+150	°C

**Note:** 1.P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

SYMBOLS	V <sub>RRM</sub> <sup>*1</sup> (V)	V <sub>RMS</sub> <sup>*2</sup> (V)	V <sub>R</sub> <sup>*3</sup> (V)	V <sub>F</sub> <sup>*4</sup> (V)	Operating temperature T <sub>J</sub> (°C)
SS12-A	20	14	20	0.55	-55 to +125
SS13-A	30	21	30		
SS14-A	40	28	40		
SS15-A	50	35	50	0.70	-55 to +150
SS16-A	60	42	60		
SS18-A	80	56	80	0.85	
SS110-A	100	70	100		
SS115-A	150	105	150	0.92	
SS120-A	200	140	200		

\*1 Repetitive peak reverse voltage

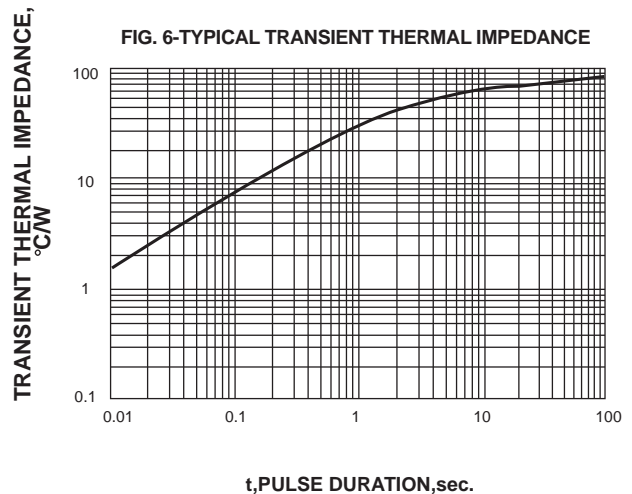
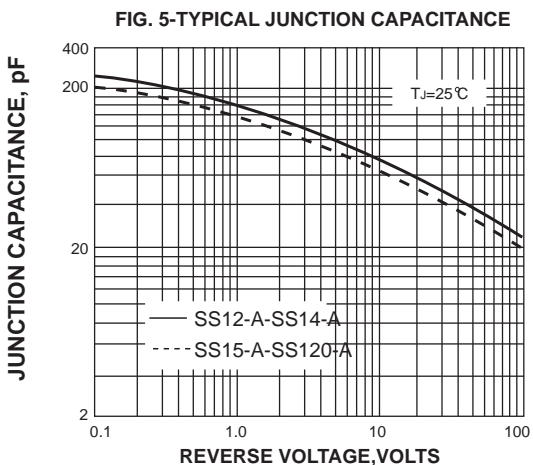
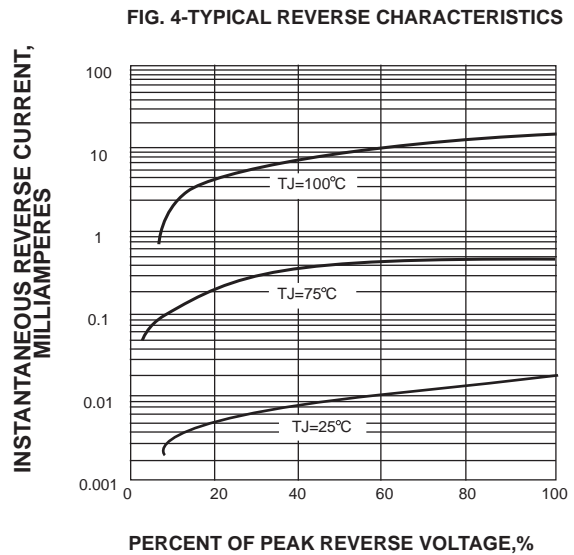
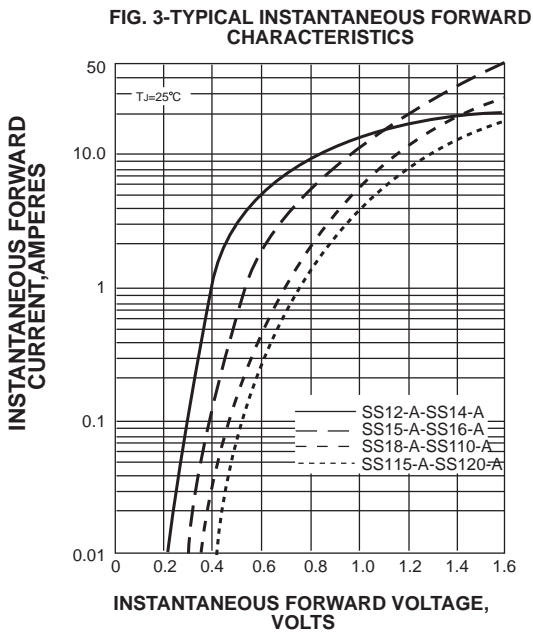
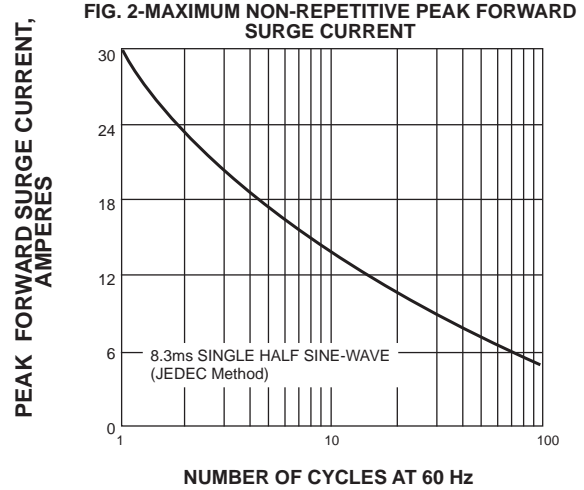
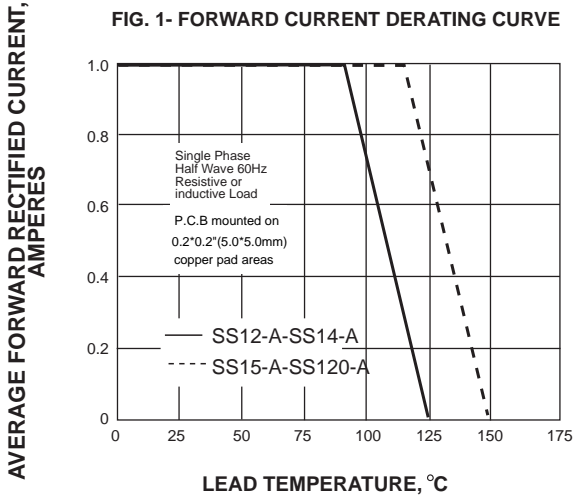
\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage@I<sub>F</sub>=1.0A

# SS12-A THRU SS120-A

## Rating and characteristic curves



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## Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

## Marking

Type number	Marking code	Example	
SS12-A	SS12	For Halogen Device	For Halogen-free Device
SS13-A	SS13		
SS14-A	SS14		
SS15-A	SS15		
SS16-A	SS16		
SS18-A	SS18		
SS110-A	SS110		
SS115-A	SS115		
SS120-A	SS120		

## Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SMA	0.110 (2.80)	0.063 (1.60)	0.087 (2.20)