

# SS24 THRU SS220

LEC

## Schottky Barrier Rectifiers

Reverse Voltage: 40 to 200 Volts

Forward Current: 2.0 Ampere

**RoHS Device**  
**Halogen Free**

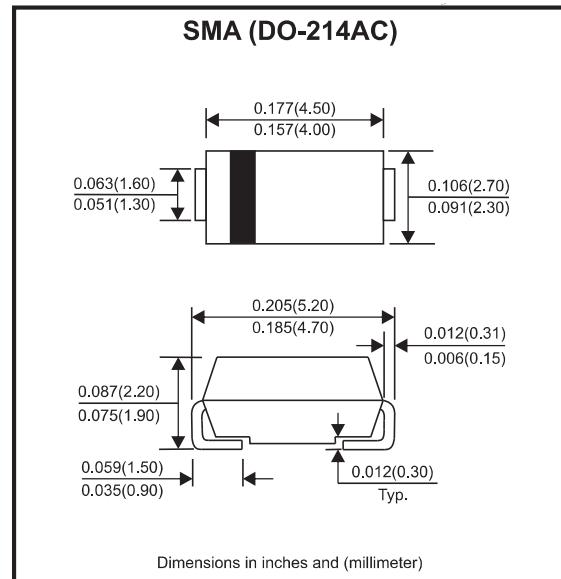


### Features

- Metal silicon junction, majority carrier conduction.
- For surface mounted applications.
- Low power loss, high efficiency.
- High forward surge current capability.
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

### Mechanical data

- Case: SMA
- Terminals: Solderable per MIL-STD-750, method 2026.



### 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 by 20%

Parameter	Symbols	SS24	SS26	SS210	SS215	SS220	Units
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	40	60	100	150	200	V
Maximum RMS voltage	V <sub>RMS</sub>	28	42	70	105	140	V
Maximum DC blocking voltage	V <sub>DC</sub>	40	60	100	150	200	V
Maximum average forward rectified current	I <sub>F(AV)</sub>			2			A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>			50			A
Max instantaneous forward voltage at 2A	V <sub>F</sub>	0.55	0.70	0.85	0.95		V
Maximum DC reverse current T <sub>j</sub> = 25°C at rated DC reverse voltage T <sub>j</sub> = 100°C	I <sub>R</sub>	0.5 5		0.3 3			mA
Typical junction capacitance (Note 1)	C <sub>j</sub>	220		80			pF
Typical thermal resistance (Note 2)	R <sub>θJA</sub>		80				°C/W
Operating junction temperature range	T <sub>j</sub>			-55 ~ +150			°C
Storage temperature range	T <sub>stg</sub>			-55 ~ +150			°C

Notes: 1. Measured at 1 MHz and applied reverse voltage of 4 V D.C

2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

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## Rating and Characteristic Curves

Fig.1 - Forward Current Derating Curve

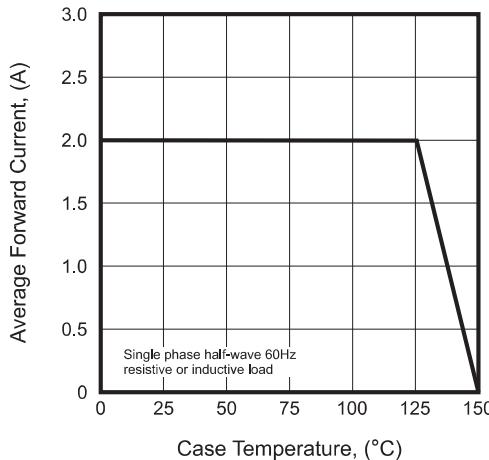


Fig.2 - Typical Reverse Characteristics

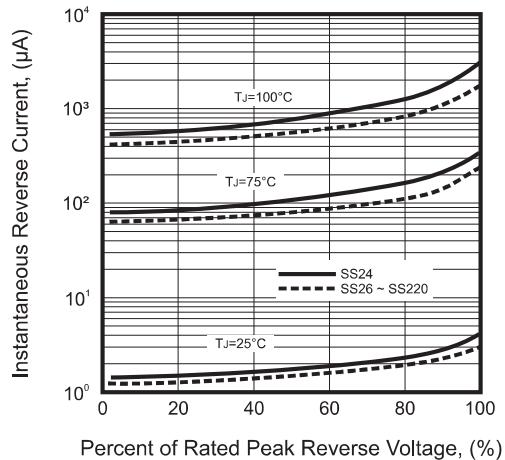


Fig.3 - Typical Forward Characteristic

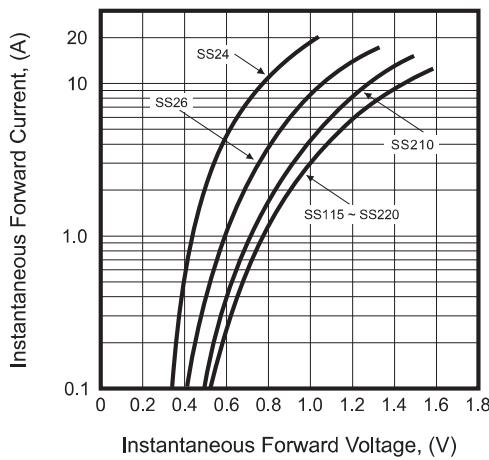


Fig.4 - Typical Junction Capacitance

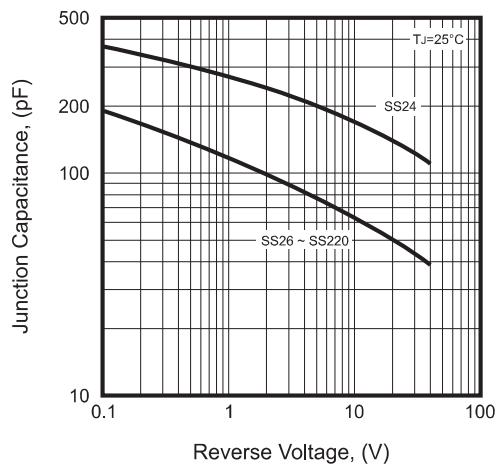


Fig.5 - Maximum Non-Repetitive Peak Forward Surge Current

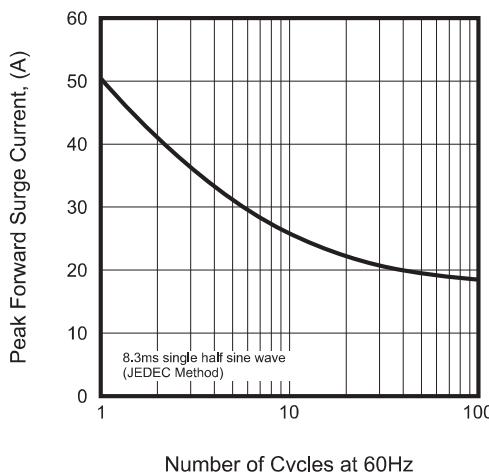
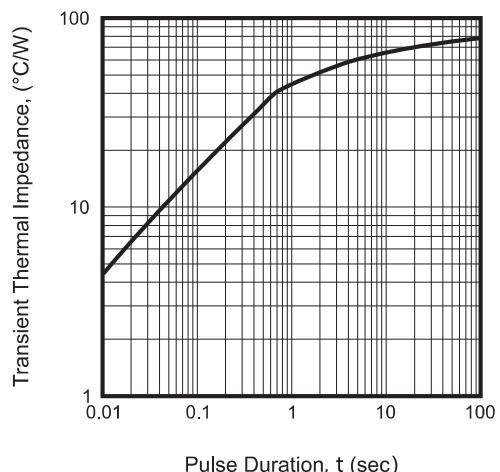
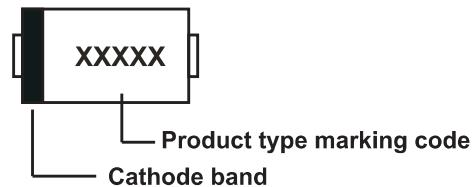


Fig.6 - Typical Transient Thermal Impedance



## **Marking Code**

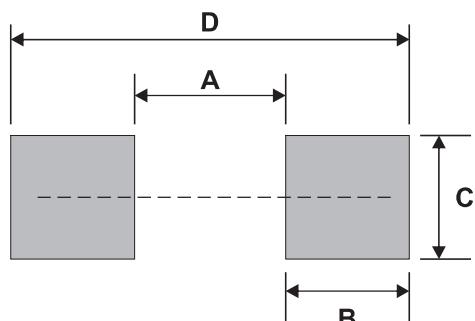
Part Number	Marking Code
SS24	SS24
SS26	SS26
SS210	SS210
SS215	SS215
SS220	SS220



xxxx/xxxxx = Product type marking code

## **Suggested PAD Layout**

SIZE	DO-214AC (SMA)	
	(mm)	(inch)
A	2.20	0.087
B	1.80	0.071
C	1.80	0.071
D	5.80	0.228



Note: 1. The pad layout is for reference purpose only.

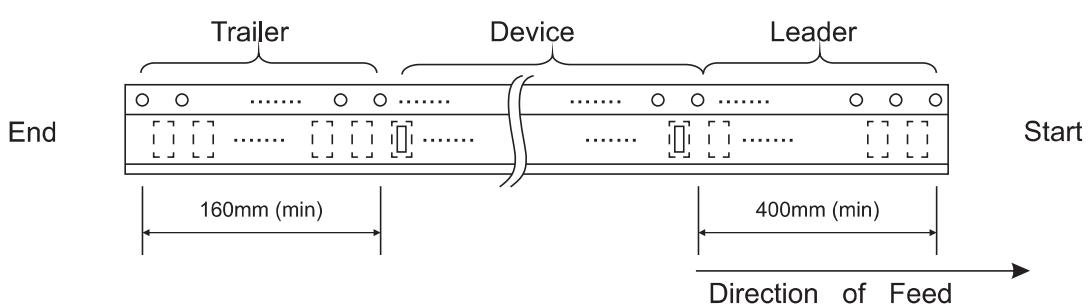
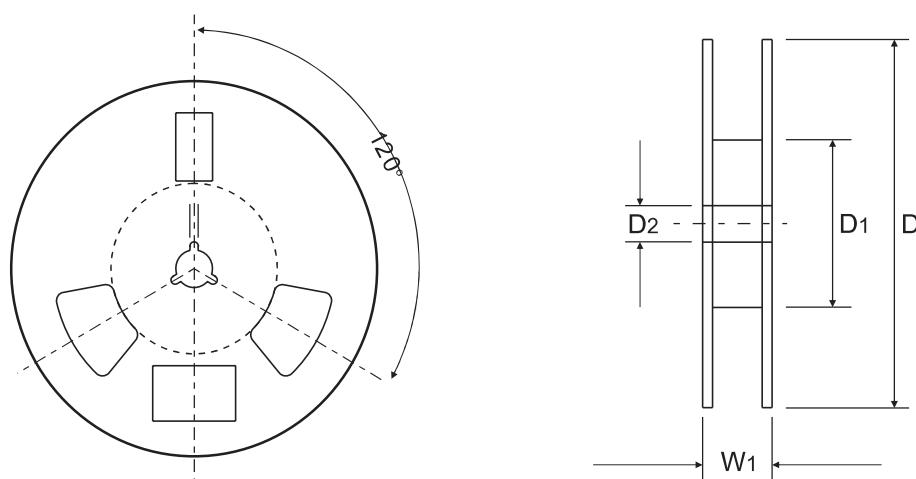
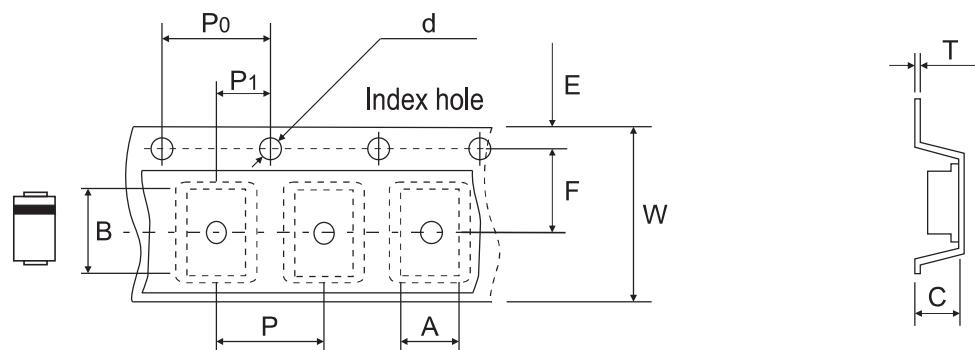
## **Standard Packaging**

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
DO-214AC (SMA)	5,000	13

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## Reel Taping Specification



DO-214AC (SMA)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	$2.70 \pm 0.10$	$5.33 \pm 0.10$	$2.35 \pm 0.10$	$1.55 \pm 0.05$	$330 \pm 2.00$	$75.00 \pm 1.00$	$13.00 \pm 0.20$
	(inch)	$0.106 \pm 0.004$	$0.210 \pm 0.004$	$0.093 \pm 0.004$	$0.061 \pm 0.002$	$12.992 \pm 0.079$	$2.953 \pm 0.039$	$0.512 \pm 0.008$

DO-214AC (SMA)	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	$1.75 \pm 0.10$	$5.50 \pm 0.05$	$4.00 \pm 0.10$	$4.00 \pm 0.10$	$2.00 \pm 0.10$	$0.20 \pm 0.03$	$12.00 \pm 0.30$	$14.70 \pm 2.00$ - 1.00
	(inch)	$0.069 \pm 0.004$	$0.217 \pm 0.002$	$0.157 \pm 0.004$	$0.157 \pm 0.004$	$0.079 \pm 0.004$	$0.008 \pm 0.001$	$0.472 \pm 0.012$	$0.579 \pm 0.079$ - 0.039

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