

# SS34 THRU SS320



## Schottky Barrier Rectifiers

Reverse Voltage: 40 to 200 Volts

Forward Current: 3.0 Ampere

RoHS Device  
Halogen Free

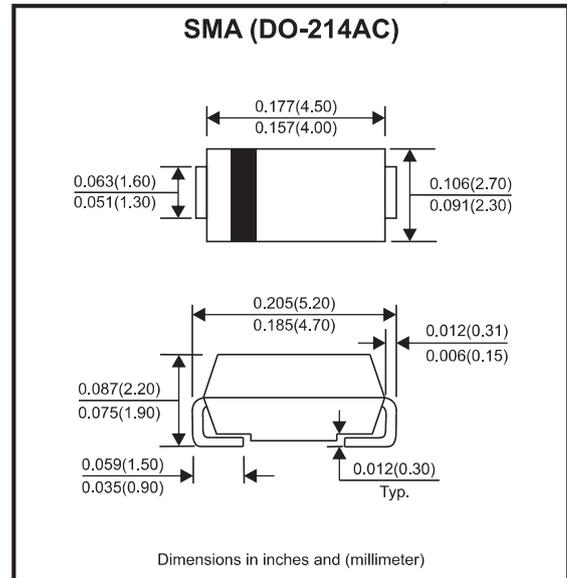


### Features

- 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	SS34	SS36	SS310	SS315	SS320	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	40	60	100	150	200	V
Maximum RMS voltage	$V_{RMS}$	28	42	70	105	140	V
Maximum DC blocking voltage	$V_{DC}$	40	60	100	150	200	V
Maximum average forward rectified current	$I_{F(AV)}$	3					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	80					A
Max instantaneous forward voltage at 3A	$V_F$	0.55	0.70	0.85	0.95		V
Maximum DC reverse current $T_j = 25^\circ\text{C}$ at rated DC reverse voltage $T_j = 100^\circ\text{C}$	$I_R$	0.5 5		0.3 3			mA
Typical junction capacitance (Note 1)	$C_j$	250			180		pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JC}$	70 18				°C/W	
Operating junction temperature range	$T_j$	-55 ~ +150					°C
Storage temperature range	$T_{stg}$	-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.

Company reserves the right to improve product design , functions and reliability without notice.

Rev:1.0

## Rating and Characteristic Curves

Fig.1 - Forward Current Derating Curve

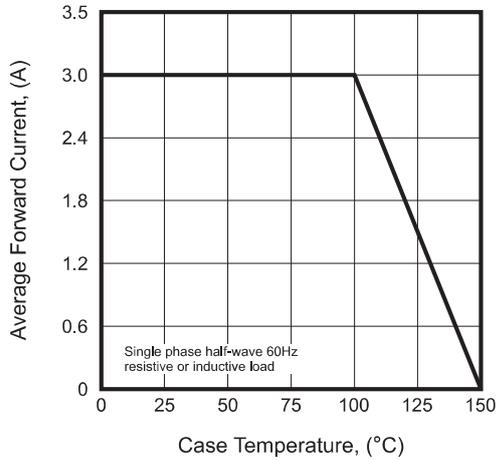


Fig.2 - Typical Reverse Characteristics

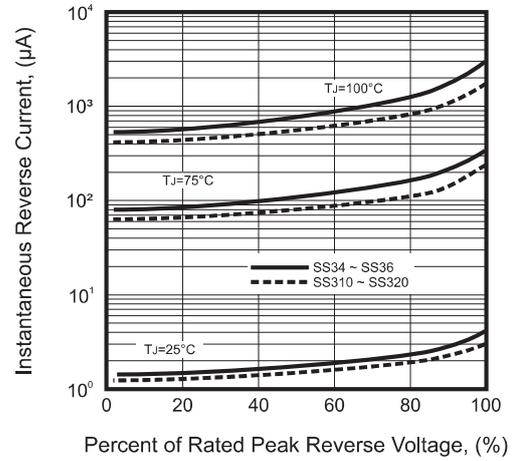


Fig.3 - Typical Forward Characteristic

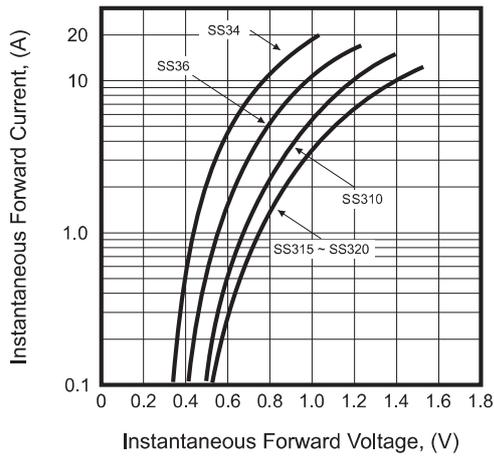


Fig.4 - Typical Junction Capacitance

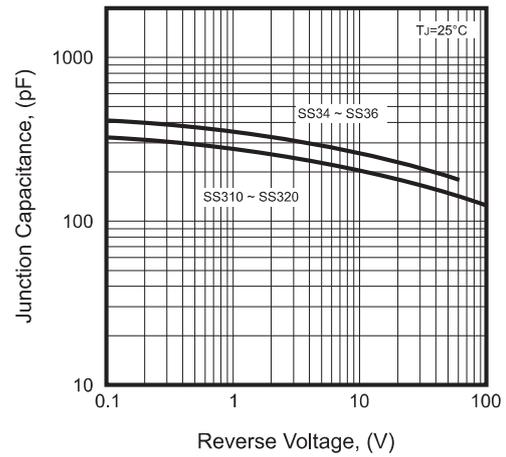


Fig.5 - Maximum Non-Repetitive Peak Forward Surge Current

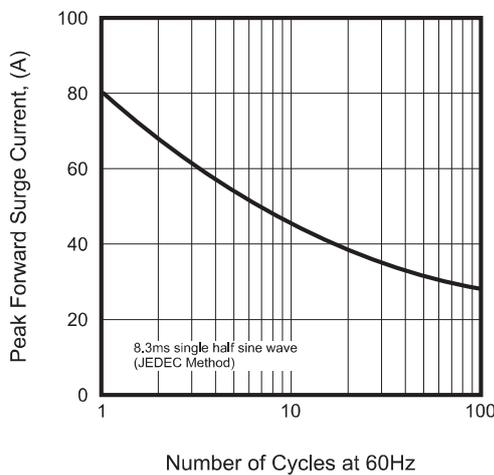
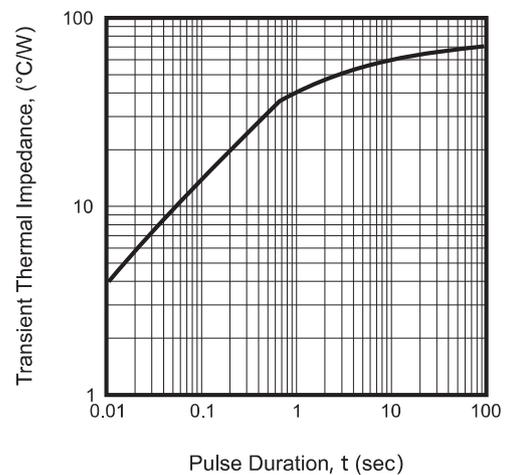
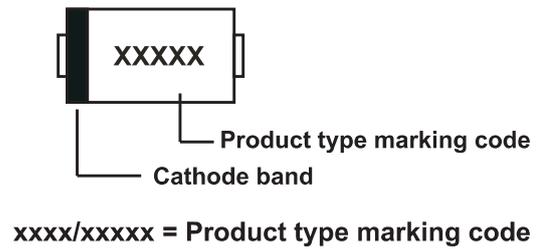


Fig.6 - Typical Transient Thermal Impedance



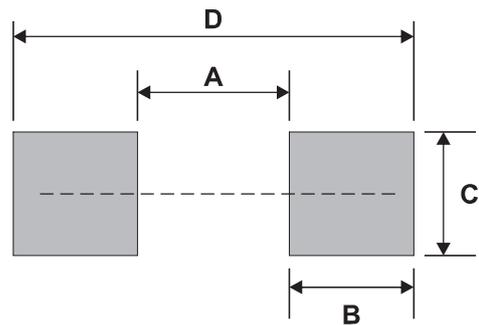
## Marking Code

Part Number	Marking Code
SS34	SS34
SS36	SS36
SS310	SS310
SS315	SS315
SS320	SS320



## 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.

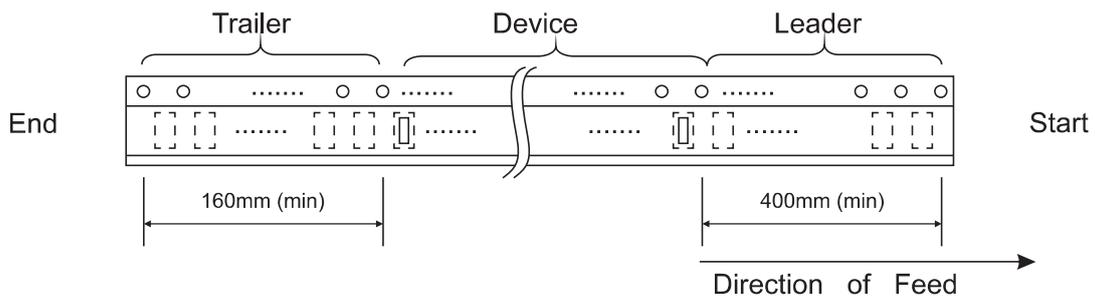
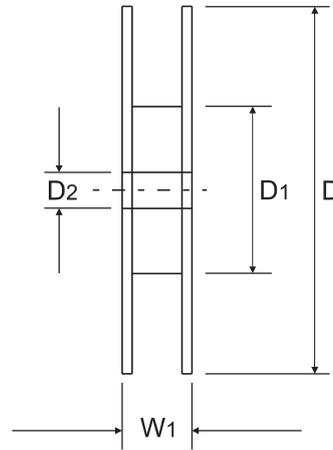
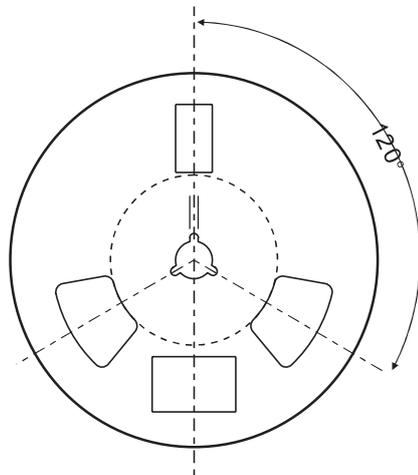
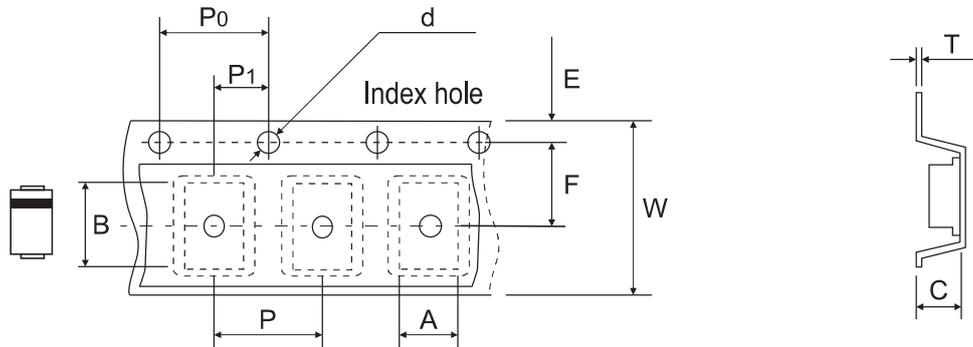
## Standard Packaging

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

# SS34F THRU SS320F



## Reel Taping Specification



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

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

Company reserves the right to improve product design , functions and reliability without notice.

Rev:1.0