

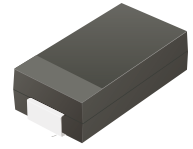
## SS14-HF Thru. SS120-HF

Reverse Voltage: 40 to 200 Volts

Forward Current: 1.0 Amp

RoHS Device

Halogen Free

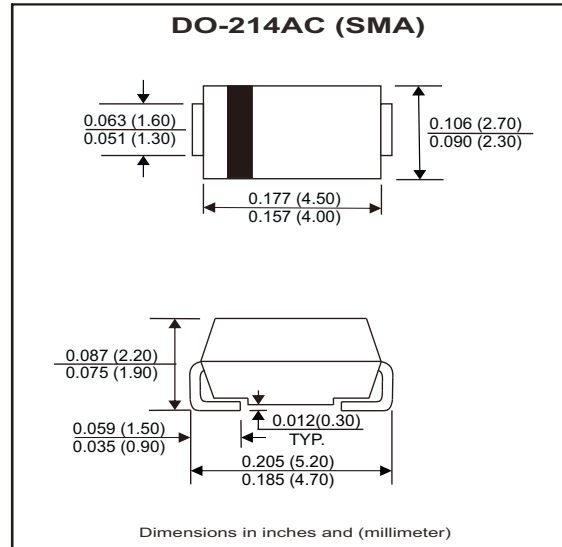


### Features

- 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
- Approx. Weight: 70mg / 0.0025oz



### 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	SS14	SS16	SS110	SS115	SS120	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	$I_{F(AV)}$	1.0					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	25					A
Max instantaneous forward voltage at 1 A	$V_F$	0.55	0.70	0.85	0.90		V
Maximum DC reverse current at rated DC reverse voltage	$I_R$	0.3 10		0.2 5	0.1 2		mA
Typical junction capacitance (Note 1)	$C_j$	110	80				pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	90					°C/W
Operating junction temperature range	$T_j$	-55 ~ +125					°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:B

## Rating and Characteristic Curves (SS14-HF Thru. SS120-HF)

Fig.1 - Forward Current Derating Curve

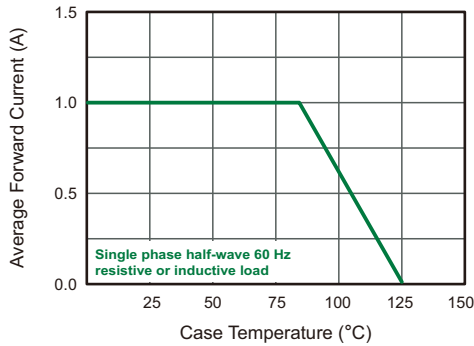


Fig.2 - Typical Reverse Characteristics

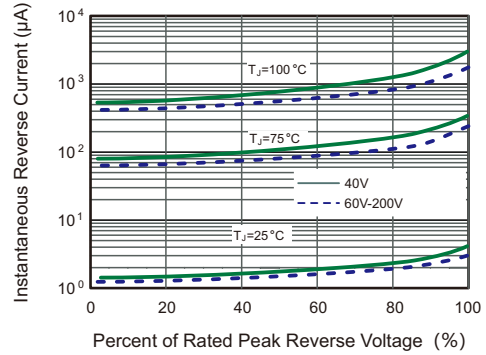


Fig.3 - Typical Forward Characteristic

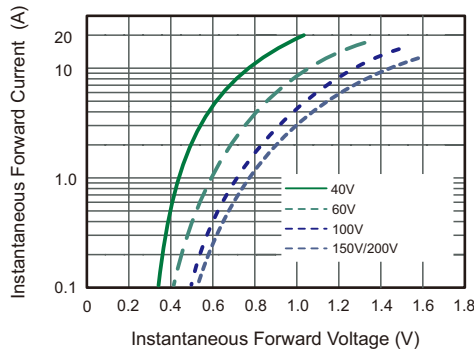


Fig.4 - Typical Junction Capacitance

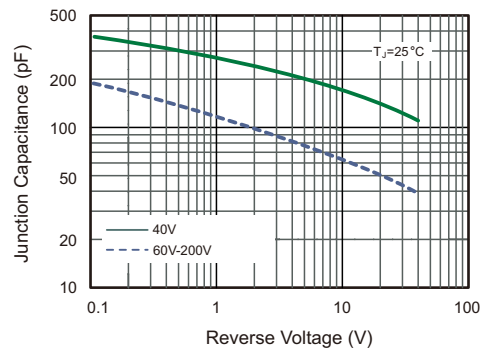


Fig.5 - Maximum Non-Repetitive Peak Forward Surge Current

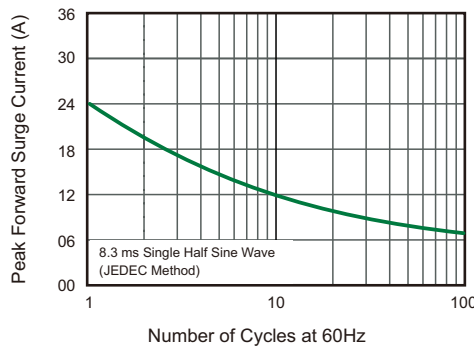
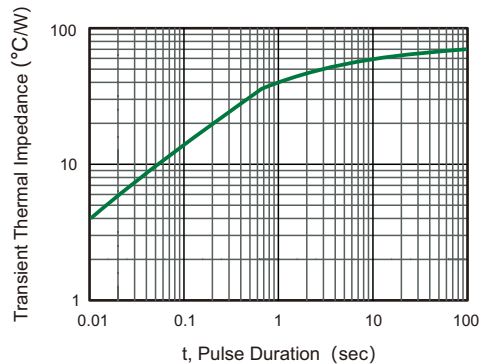
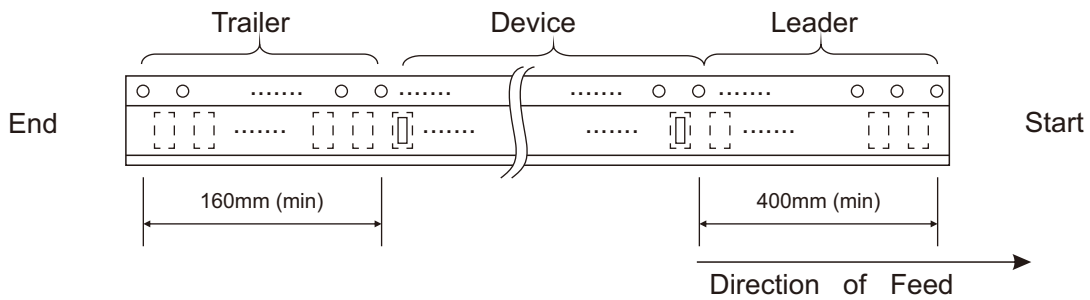
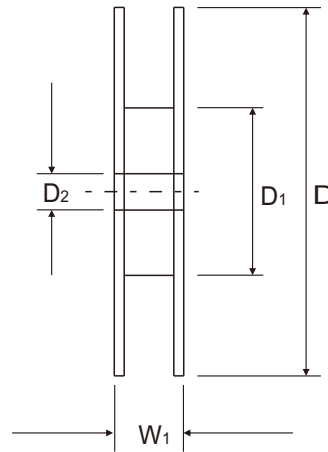
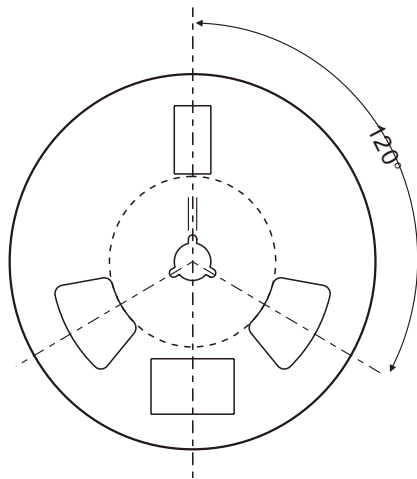
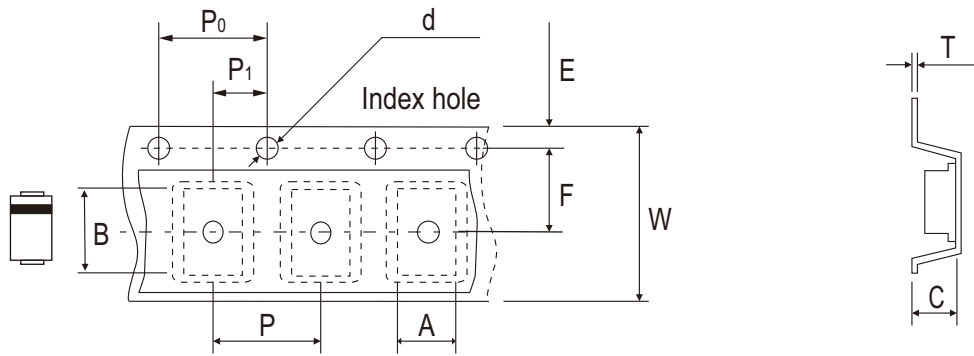


Fig.6 - Typical Transient Thermal Impedance



## Reel Taping Specification



DO-214AC (SMA)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.70 ± 0.10	5.30 ± 0.10	2.66 ± 0.10	1.50 ± 0.10	330 ± 2.00	50.0 MIN.	13.50 ± 0.50
	(inch)	0.106 ± 0.004	0.209 ± 0.004	0.105 ± 0.004	0.059 ± 0.004	12.99 ± 0.079	1.969 MIN.	0.531 ± 0.020

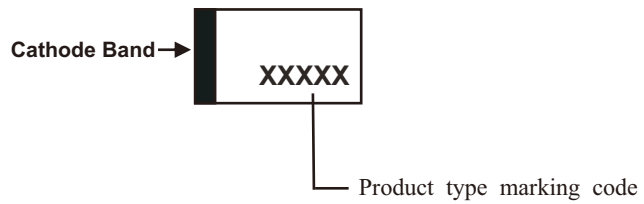
DO-214AC (SMA)	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	5.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.60 ± 0.10	12.0 ± 0.30	18.4 ± 1.00
	(inch)	0.069 ± 0.004	0.217 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.024 ± 0.004	0.472 ± 0.012	0.724 ± 0.040

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REV:B

## Marking Code

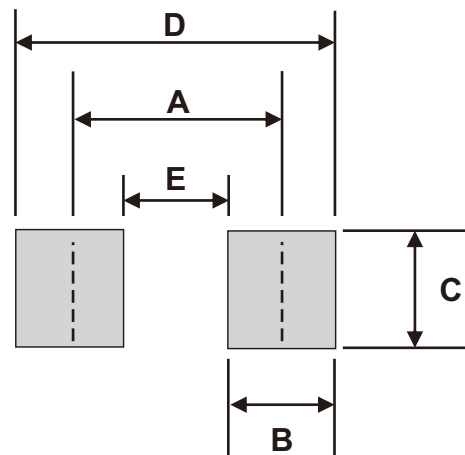
Part Number	Marking Code
SS14-HF	SS14
SS16-HF	SS16
SS110-HF	SS110
SS115-HF	SS115
SS120-HF	SS120



xxxxx = Product type marking code

## Suggested PAD Layout

SIZE	DO-214AC (SMA)	
	(mm)	(inch)
A	4.00	0.157
B	2.50	0.100
C	1.80	0.071
D	6.50	0.256
E	1.50	0.060



## Standard Packaging

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