

SS14 THRU SS120



Schottky Barrier Rectifiers

Reverse Voltage: 40 to 200 Volts

Forward Current: 1.0 Ampere

RoHS Device

Halogen Free

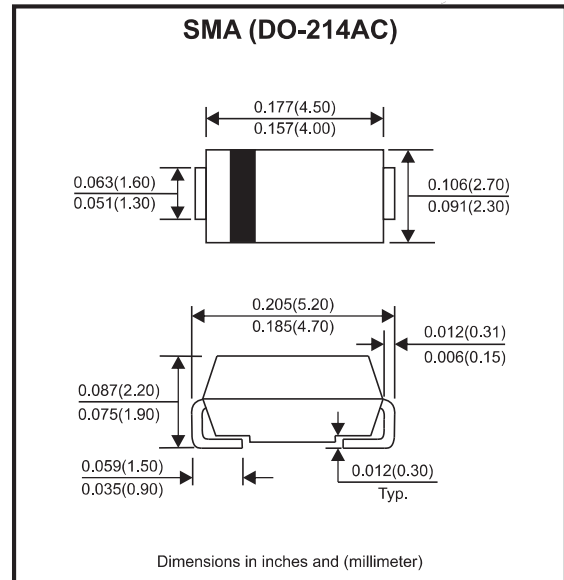


Features

- 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	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					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30					A
Max instantaneous forward voltage at 1A	V _F	0.55	0.70	0.85	0.90		V
Maximum DC reverse current T _J = 25°C at rated DC reverse voltage T _J = 100°C	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 _{θJA}	95					°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:1.0

Rating and Characteristic Curves

Fig.1 - Forward Current Derating Curve

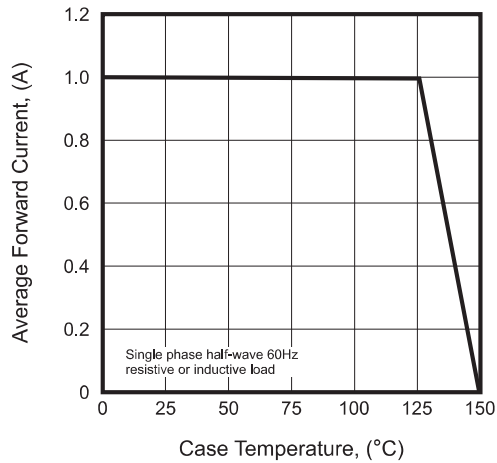


Fig.2 - Typical Reverse Characteristics

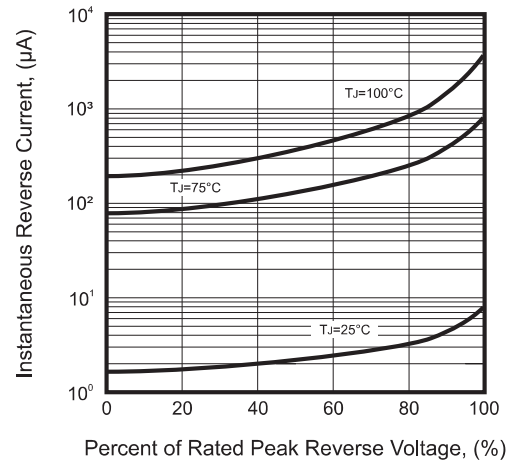


Fig.3 - Typical Forward Characteristic

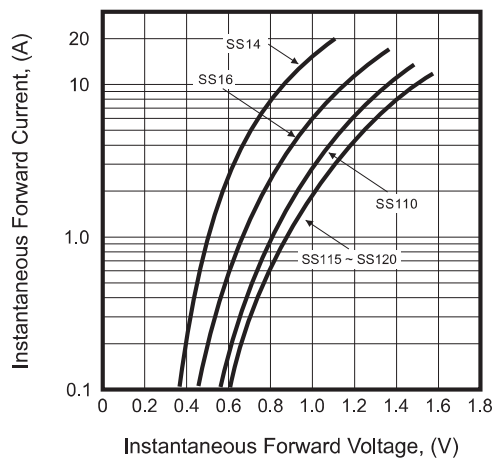


Fig.4 - Typical Junction Capacitance

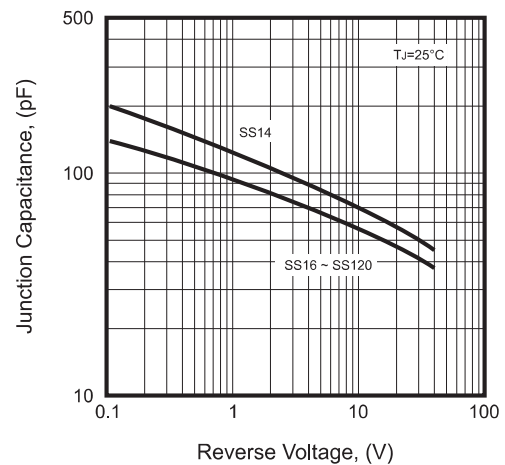


Fig.5 - Maximum Non-Repetitive Peak Forward Surge Current

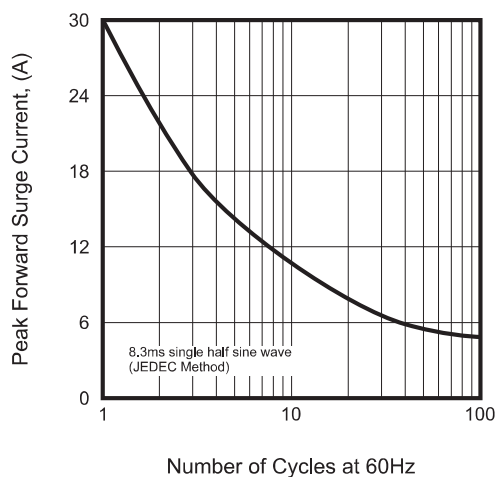
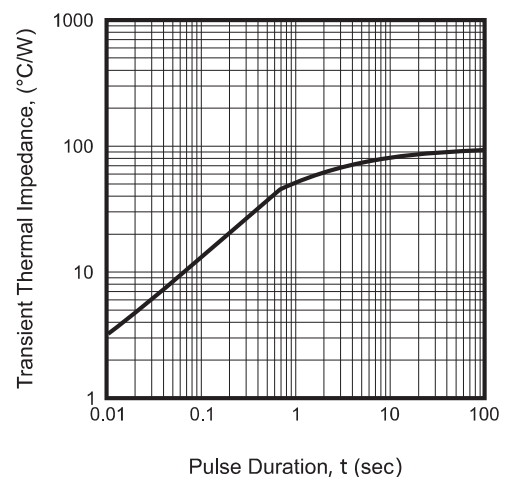
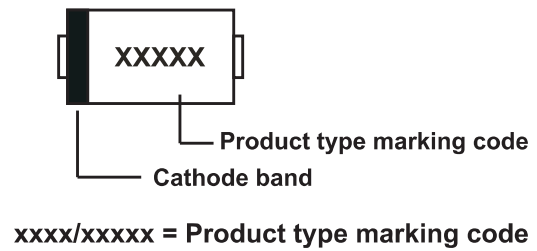


Fig.6 - Typical Transient Thermal Impedance



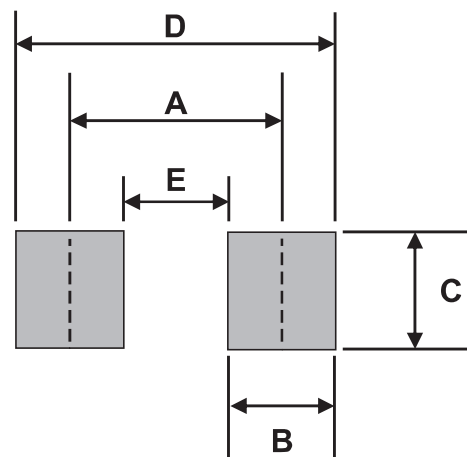
Marking Code

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



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



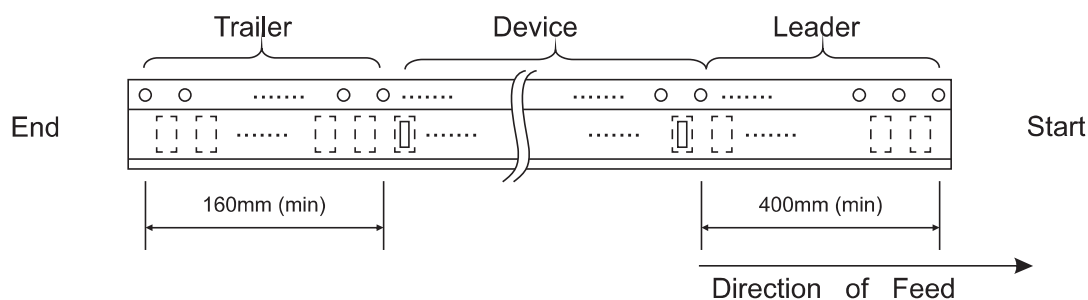
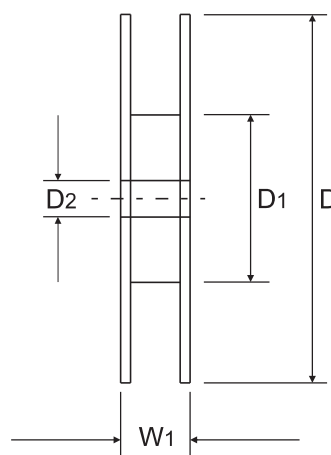
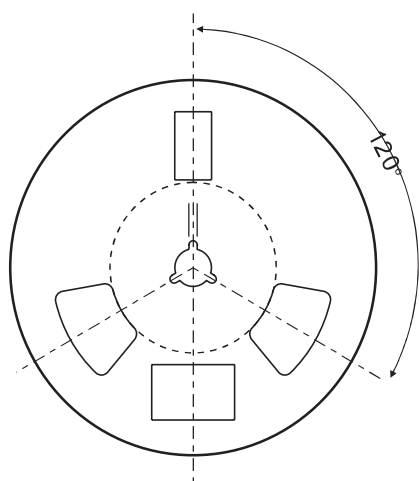
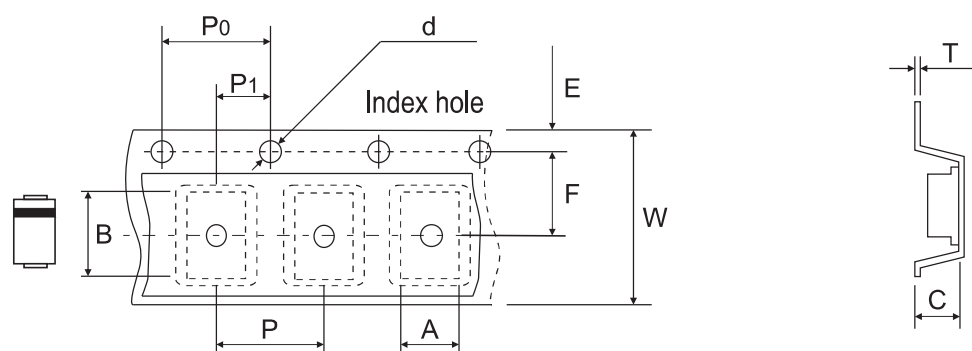
Standard Packaging

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

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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	$0.579 + 0.079 - 0.039$

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