

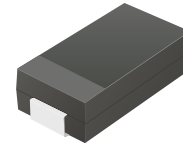
ACDBA3100-HF

Reverse Voltage: 100 Volts

Forward Current: 3 Amp

RoHS Device

Halogen free

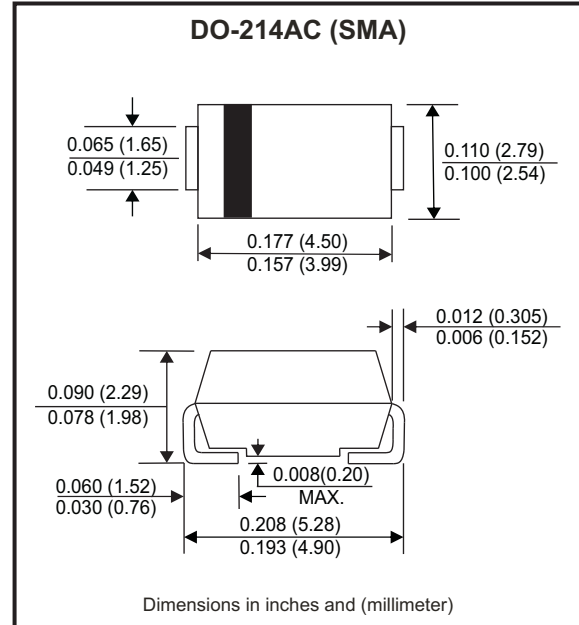


Features

- Low profile package.
- Ideal for automated placement.
- Low forward voltage drop.
- High surge capability.
- Guard ring for overvoltage protection.
- Comply with AEC-Q101

Mechanical data

- Case: DO-214AC / SMA, molded plastic.
- Epoxy: UL flammability classification rate 94V-0 .
- Terminals: Lead free plating (Tin finish).
Solderable per MIL-STD-202, Method 208.
- Polarity: Cathode band.
- Weight: 0.062 grams(approx.).



Circuit Diagram



Maximum Ratings (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive peak reverse voltage		V _{RRM}			100	V
RMS voltage		V _{RMS}			70	V
DC blocking voltage		V _{DC}			100	V
Average forward rectified current		I _F			3	A
Peak forward surge current	8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}			80	A
Operating temperature range		T _J	-55		+150	°C
Storage temperature range		T _{STG}	-55		+150	°C

Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I _F = 3A	V _F			0.85	V
Reverse current	V _R = V _{RRM} , T _A = 25°C	I _R			0.2	mA
	V _R = V _{RRM} , T _A = 100°C	I _R			5.0	mA
Junction capacitance	f = 1MHz and applied 4V DC reverse Voltage	C _J		100		pF
Thermal resistance	Junction to case	R _{θjc}		25		°C/W

Note: 1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC.

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RATING AND CHARACTERISTIC CURVES (ACDBA3100-HF)

Fig.1 - Typical Forward Current Derating Curve

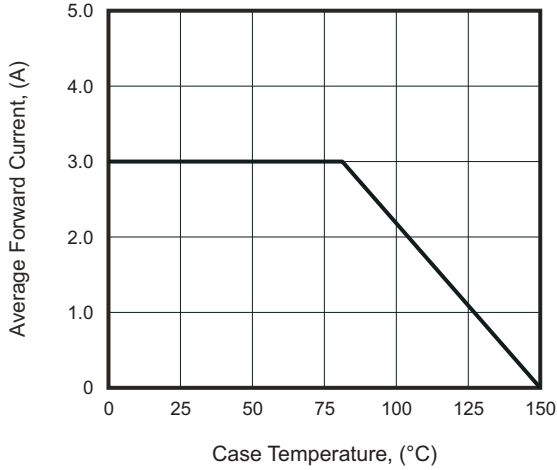


Fig.2 - Typical Forward Characteristics

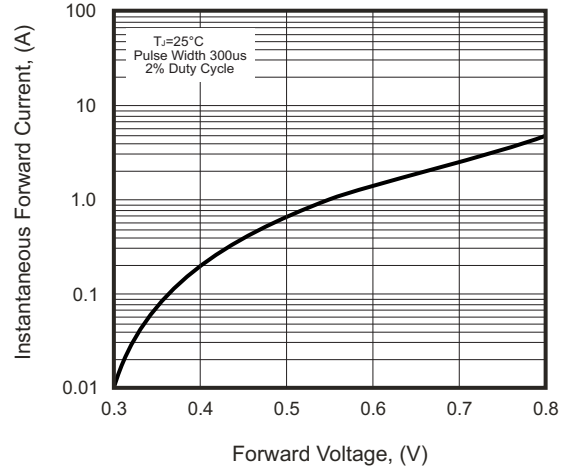


Fig.3 - Maximum Non-Repetitive Forward Surge Current

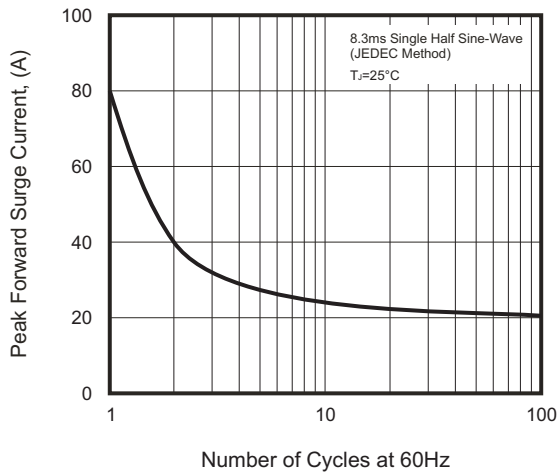


Fig.4 - Typical Reverse Characteristics

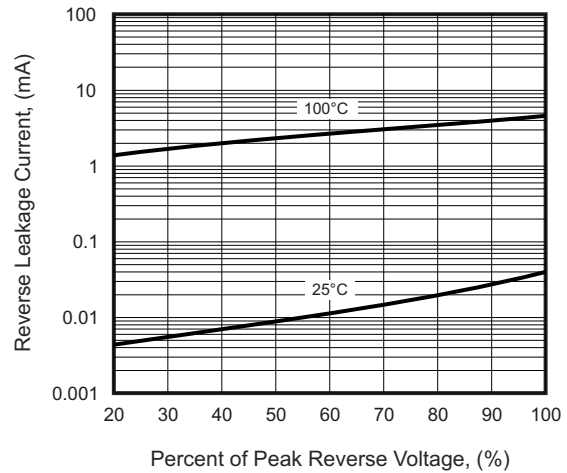
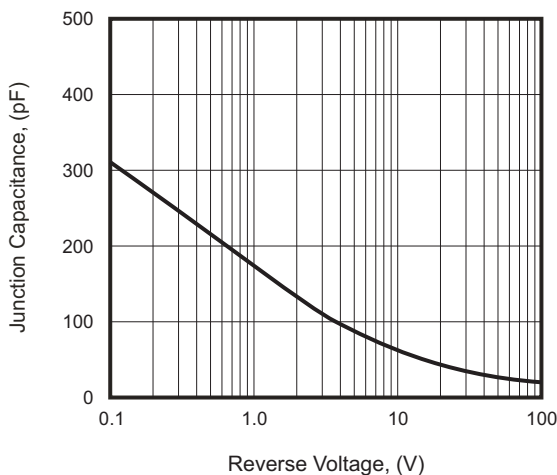
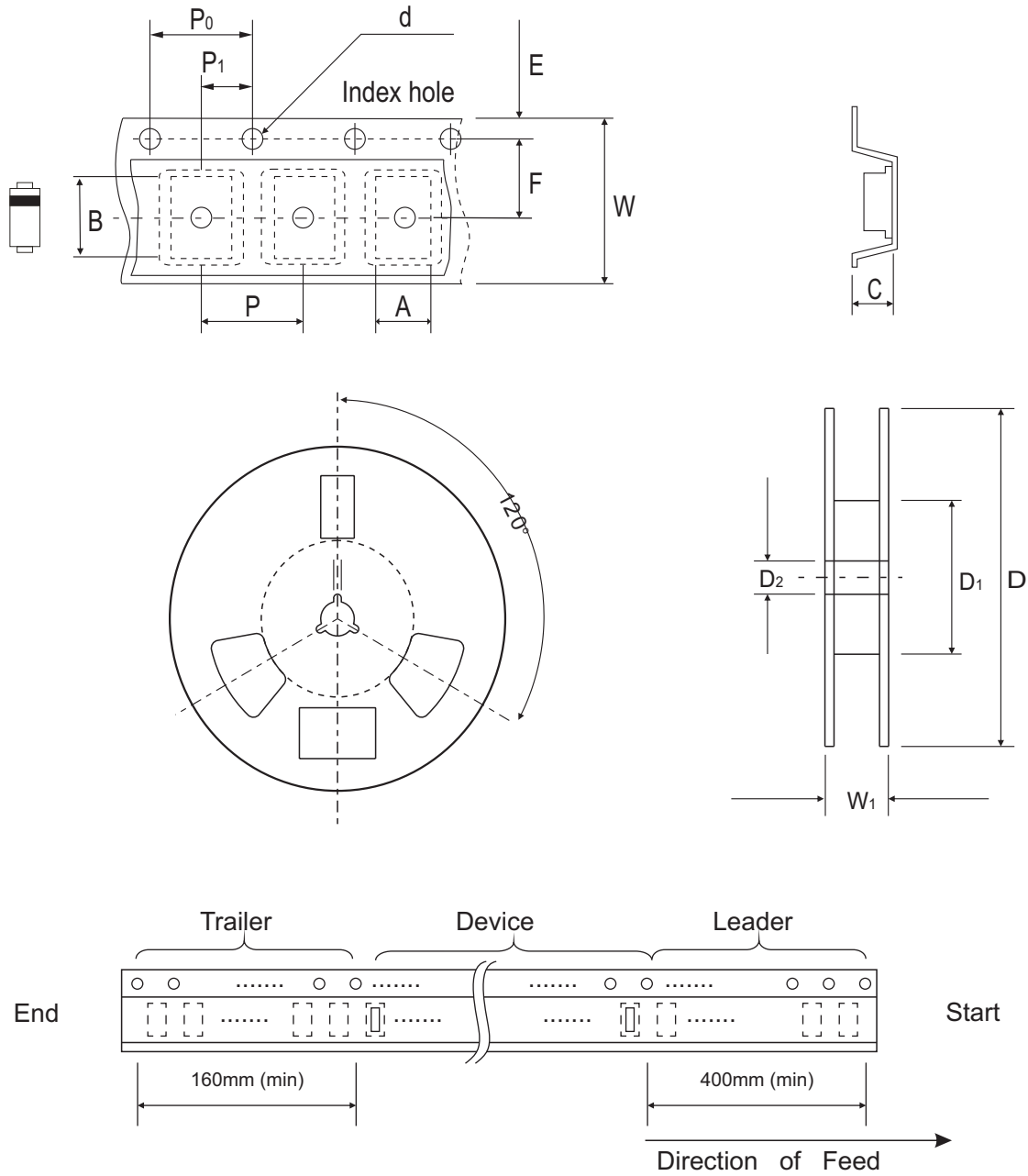


Fig.5 - Typical Junction Capacitance



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Reel Taping Specification



DO-214AC (SMA)	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	2.90 MAX.	5.90 MAX.	2.66 MAX.	1.50 ± 0.10	330 ± 2.00	50 MIN.	13.50 ± 1.00
	(inch)	0.114 MAX.	0.232 MAX.	0.105 MAX.	0.059 ± 0.004	13.00 ± 0.079	1.969 MIN.	0.531 ± 0.039

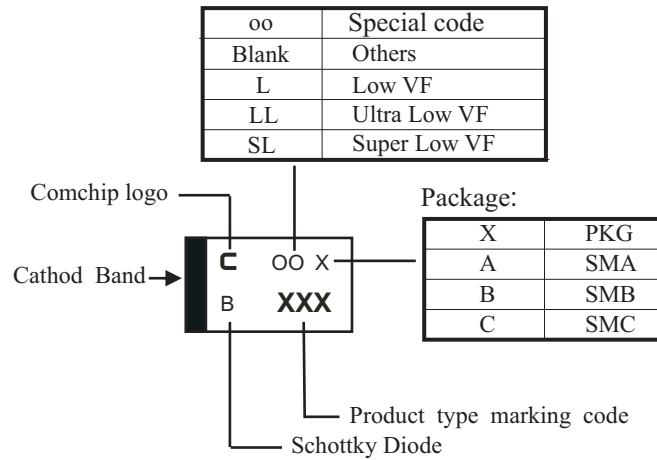
DO-214AC (SMA)	SYMBOL	E	F	P	P ₀	P ₁	W	W ₁
	(mm)	1.75 ± 0.10	5.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	12.00 ± 0.30	18.40 MAX.
	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.472 ± 0.012	0.724 MAX.

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REV: A

Marking Code

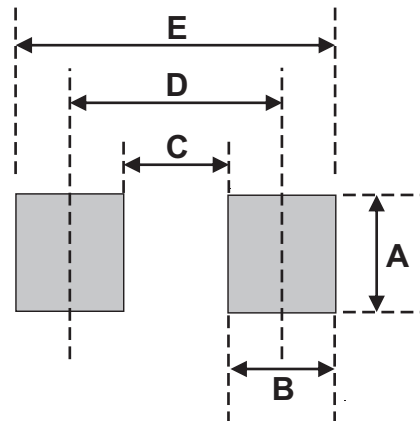
Part Number	Marking Code
ACDBA3100-HF	3100



xxx = Product type marking code

Suggested PAD Layout

SIZE	DO-214AC (SMA)	
	(mm)	(inch)
A	1.70	0.067
B	2.50	0.098
C	1.50	0.059
D	4.00	0.157
E	6.50	0.256



Note:

1. The pad layout is for reference purposes only.

Standard Packaging

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