

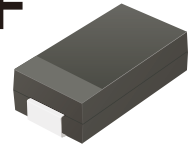
## ACURB201-HF Thru. ACURB207-HF

Reverse Voltage: 50 to 1000 Volts

Forward Current: 2 Amp

RoHS Device

Halogen Free

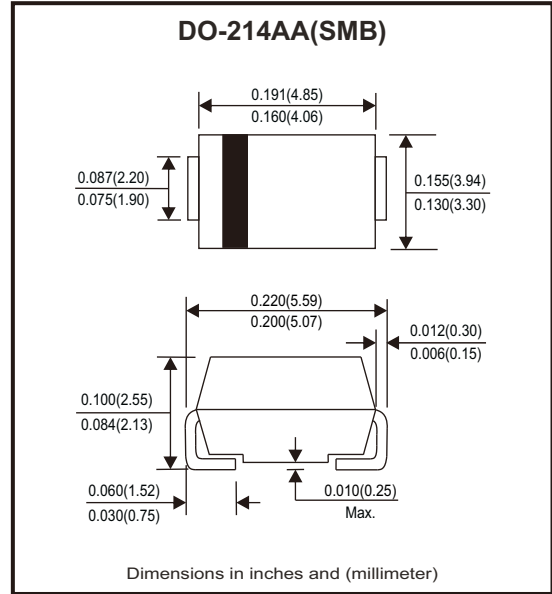


### Features

- High current capability.
- High surge current capability.
- Low reverse current.
- AEC-Q101 Qualified

### Mechanical data

- Epoxy: UL flammability classification rating 94V-0
- Case: Molded plastic, DO-214AA/SMB
- Terminals: Lead free plating(Tin Finish), Solderable per MIL-STD-202, method 208.
- Polarity: Cathode band.



### Circuit Diagram



### Maximum Ratings and Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Symbol	ACURB 201-HF	ACURB 202-HF	ACURB 203-HF	ACURB 204-HF	ACURB 205-HF	ACURB 206-HF	ACURB 207-HF	Unit
Max. repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Max. DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Max. RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Max. average forward rectified current	$I_F$	2							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	50							A
Max. instantaneous forward voltage $I_F=2A @ 25^\circ C$	$V_F$	1.0		1.3		1.7			V
Max. reverse recovery time (Note 2)	$T_{rr}$	50				75			nS
Max. DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=100^\circ C$	$I_R$	5				100			$\mu A$
Typical junction capacitance (Note 1)	$C_J$	20				pF			
Typical thermal resistance	$R_{\theta JC}$	40				$^\circ C/W$			
Operating temperature range	$T_J$	-55 to +150							$^\circ C$
Storage temperature range	$T_{STG}$	-55 to +150							$^\circ C$

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC  
2. Reverse recovery test conditions:  $I_F=0.5A$ ,  $I_R=1A$ ,  $I_{RR}=0.25A$

## Rating and Characteristics Curvers (ACURB201-HF Thru. ACURB207-HF)

Fig.1 - Typical Forward Current Derating Curve

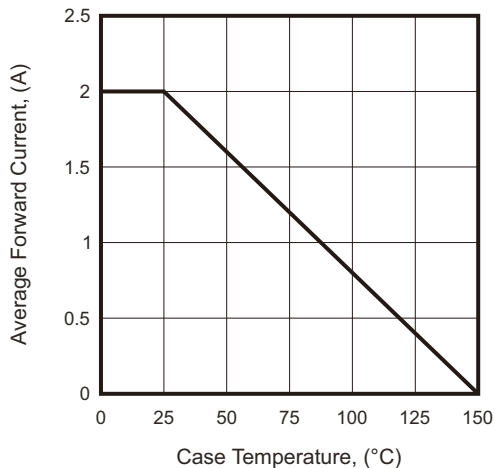


Fig.2 - Typical Forward Characteristics

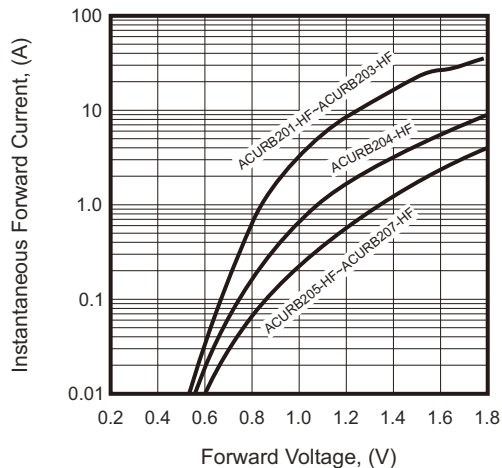


Fig.3 - Maximum Non-repetitive Forward Surge Current

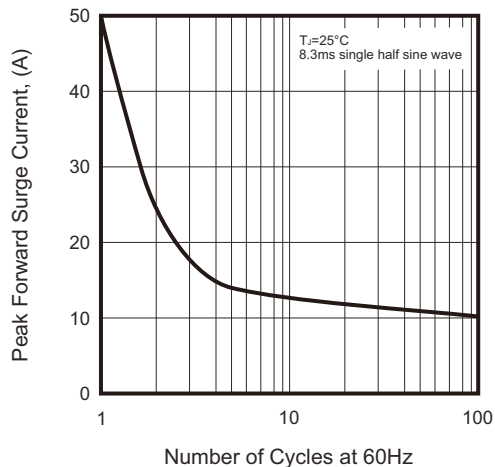


Fig.4 - Typical Reverse Characteristics

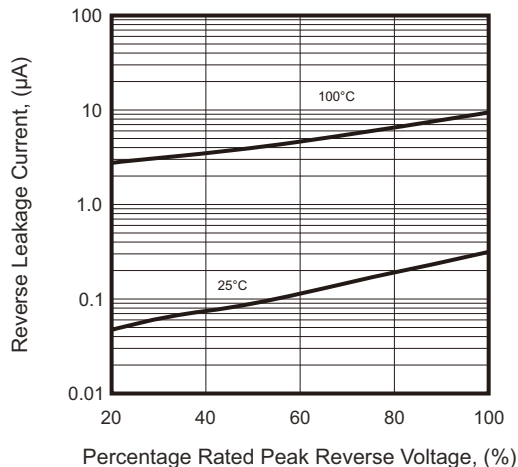
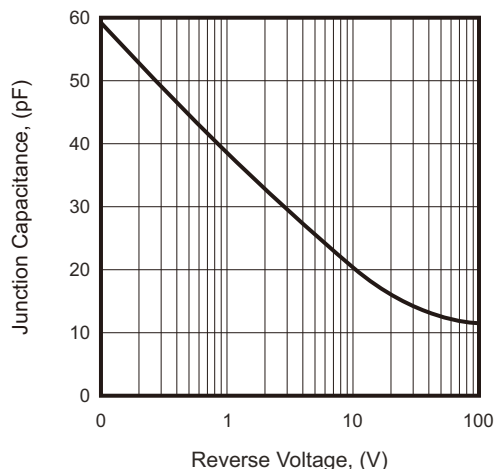
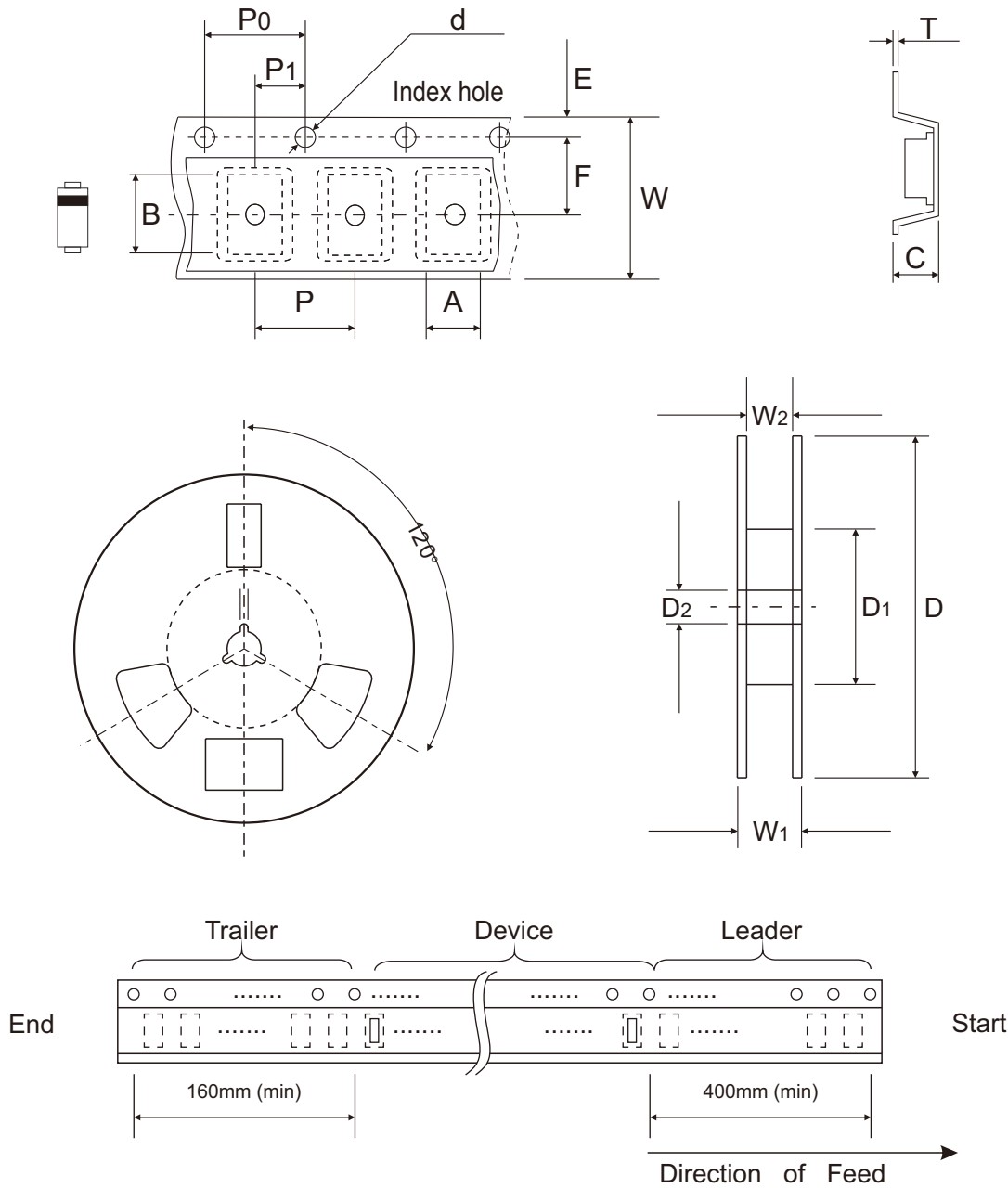


Fig.5 - Typical Junction Capacitance



## Reel Taping Specification

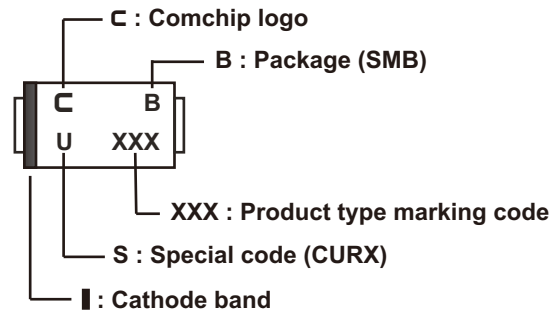


DO-214AA (SMB)	SYMBOL	A	B	C	d	D	D1	D2	E
	(mm)	4.00 Max.	5.90 Max.	3.00 Max.	1.50 ± 0.10	330.00 ± 2.00	50.00 Min.	13.50 ± 1.00	1.75 ± 0.10
	(inch)	0.157 Max.	0.232 Max.	0.118 Max.	0.059 ± 0.004	12.992 ± 0.079	1.969 Min.	0.531 ± 0.039	0.069 ± 0.004
DO-214AA (SMB)	SYMBOL	F	P	P0	P1	T	W	W1	W2
	(mm)	5.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.60 Max.	12.00 ± 0.30	18.40 Max.	14.40 Max.
	(inch)	0.217 ± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.024 Max.	0.472 ± 0.012	0.724 Max.	0.567 Max.

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

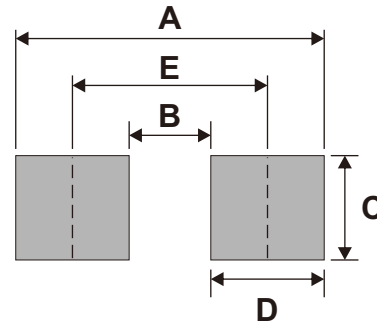
## Marking Code

Part Number	Marking Code
ACURB201-HF	201
ACURB202-HF	202
ACURB203-HF	203
ACURB204-HF	204
ACURB205-HF	205
ACURB206-HF	206
ACURB207-HF	207



## Suggested PAD Layout

SIZE	DO-214AA(SMB)	
	(mm)	(inch)
A	6.80	0.268
B	1.80	0.071
C	2.30	0.091
D	2.50	0.098
E	4.30	0.169



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

## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
DO-214AA (SMB)	3,000	13