

## ACEFC304-HF

Reverse Voltage: 200 Volts

Forward Current: 3.0 Amp

RoHS Device

Halogen free

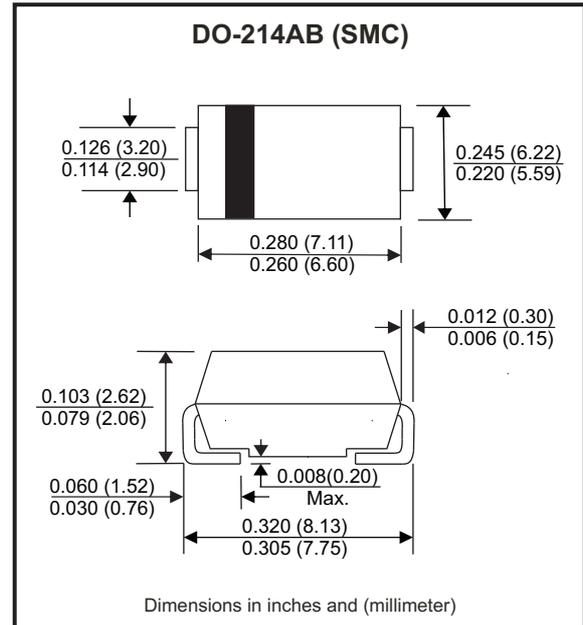


### Features

- Glass passivation pallet chip Junction.
- Ideal for automated placement.
- Ultrafast recovery times for high efficiency.
- Low forward voltage, low power losses.
- High forward surge capability.
- Comply with AEC-Q101

### Mechanical data

- Case: DO-214AB / SMC, molded plastic.
- Epoxy: UL flammability classification rate 94V-0 .
- Terminals: Lead free plating (Tin finish).  
Solderable per MIL-STD-202, Method 208.
- Polarity: Indicated by cathode band.
- Weight: 0.231 grams(approx.).



### Circuit diagram



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

Parameter	Symbol	ACEFC304-HF	Units
Max. repetitive peak reverse voltage	$V_{RRM}$	200	V
Max. DC blocking voltage	$V_{DC}$	200	V
Max. RMS voltage	$V_{RMS}$	140	V
Max. average forward rectified current	$I_F$	3	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	100	A
Max. instantaneous forward voltage $I_F = 3A @ 25^\circ C$	$V_F$	0.9	V
Max. DC reverse current at rated DC blocking voltage	$T_A=25^\circ C$	$I_R$	10
	$T_A=100^\circ C$	$I_R$	500
Typical junction capacitance (Note 1)	$C_J$	40	pF
Max. reverse recovery time (Note 2)	$T_{rr}$	20	nS
Typical thermal resistance	$R_{\theta JC}$	30	$^\circ C/W$
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. Measured with  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$ .

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

REV:A

## Rating and Characteristics Curvers (ACEFC304-HF)

Fig.1 - Typical Forward Current Derating Curve

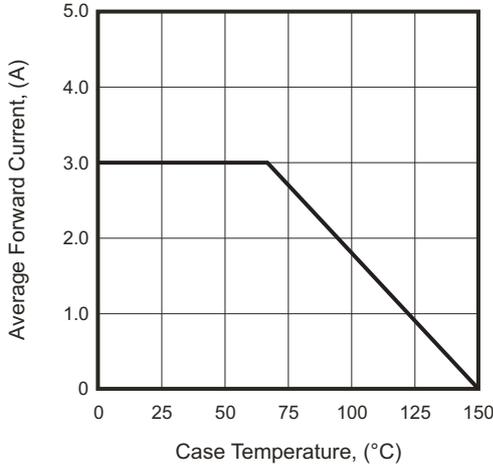


Fig.2 - Typical Forward Characteristics

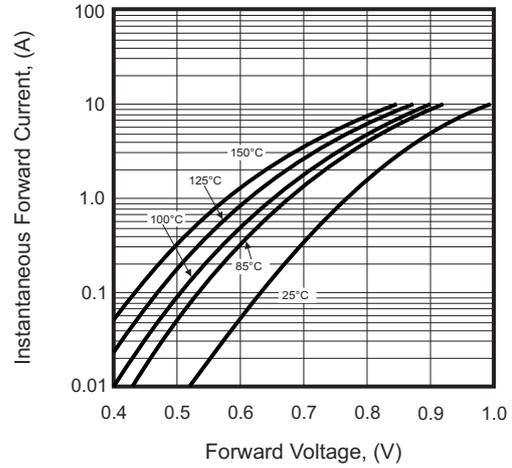


Fig.3 - Maximum Non-repetitive Forward Surge Current

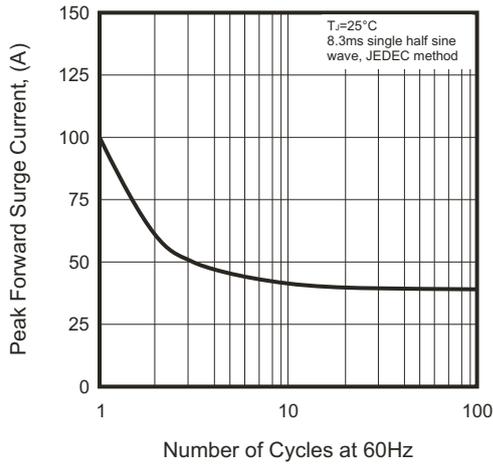


Fig.4 - Typical Reverse Characteristics

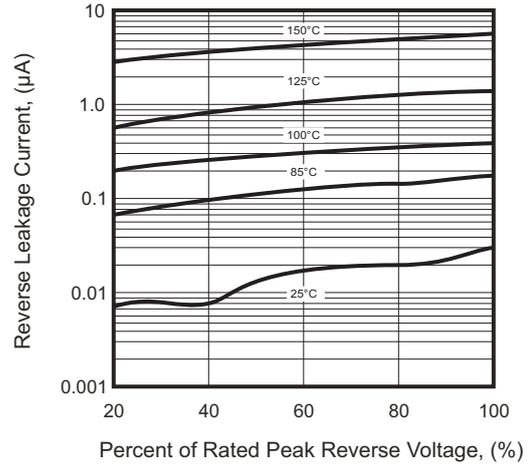
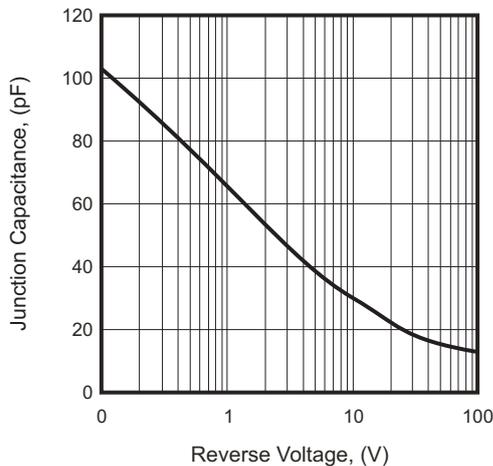
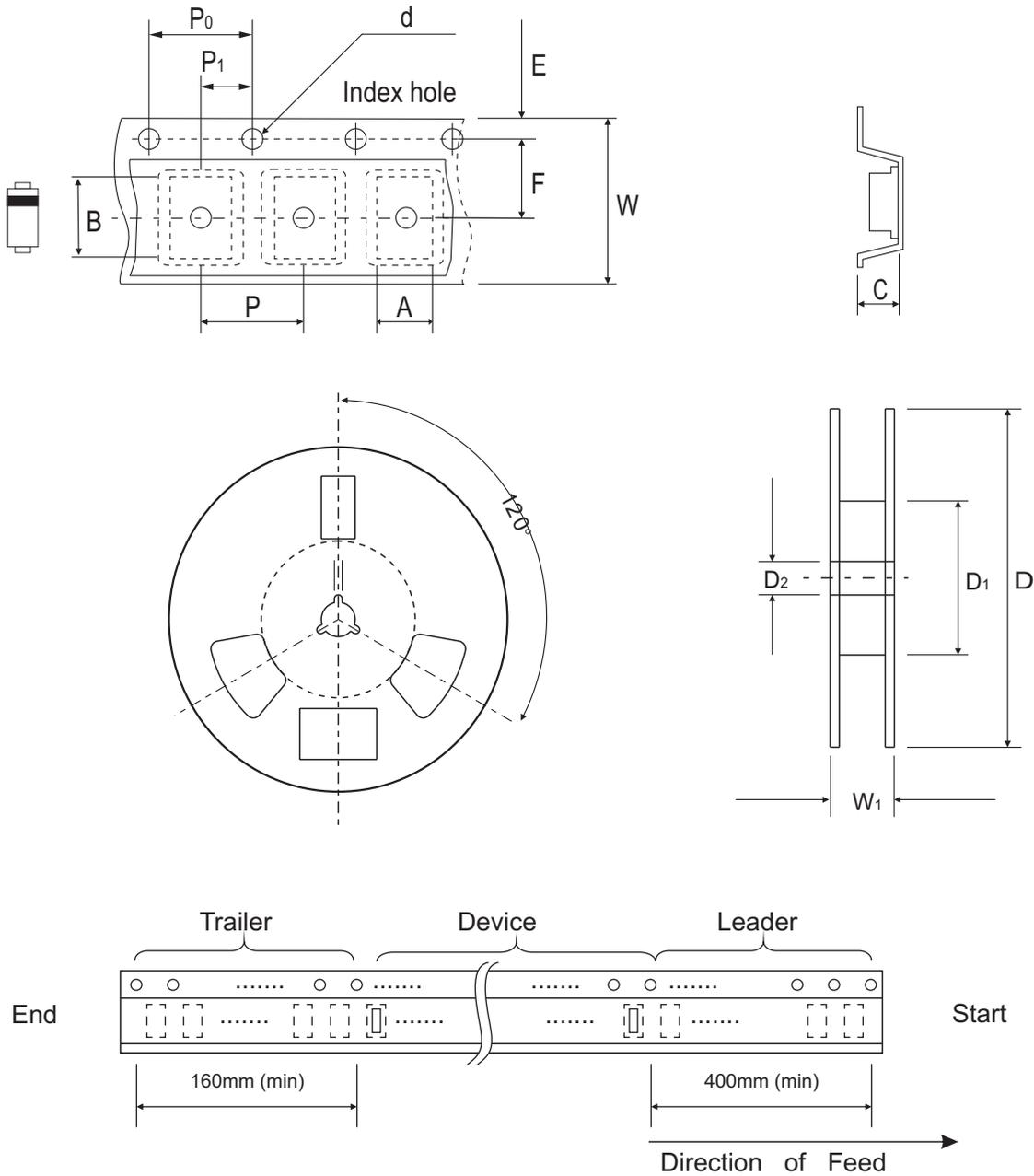


Fig.5 - Typical Junction Capacitance



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

## Reel Taping Specification



DO-214AB (SMC)	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	6.30 MAX.	8.60 MAX.	2.90 MAX.	1.50 ± 0.10	330 ± 2.00	50 MIN.	13.50 ± 1.00
	(inch)	0.248 MAX.	0.339 MAX.	0.114 MAX.	0.059 ± 0.004	13.00 ± 0.079	1.969 MIN.	0.531 ± 0.039

DO-214AB (SMC)	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	W	W <sub>1</sub>
	(mm)	1.75 ± 0.10	7.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	16.00 ± 0.30	22.40 MAX.
	(inch)	0.069 ± 0.004	0.295 ± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.630 ± 0.012	0.882 MAX.

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

REV:A

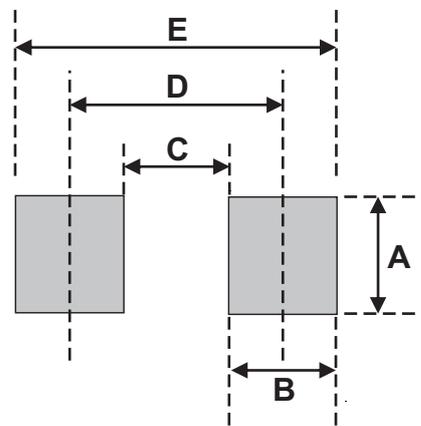
## Marking Code

Part Number	Marking Code
ACEFC304-HF	EFM304C



## Suggested PAD Layout

SIZE	DO-214AB (SMC)	
	(mm)	(inch)
A	3.30	0.130
B	2.50	0.098
C	4.40	0.173
D	6.80	0.268
E	9.40	0.370



Note:

1. The pad layout is for reference purposes only.

## Standard Packaging

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