

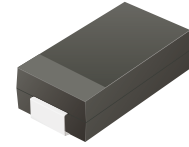
ACSFC1007-HF

Reverse Voltage: 600 Volts

Forward Current: 10 Amp

RoHS Device

Halogen Free

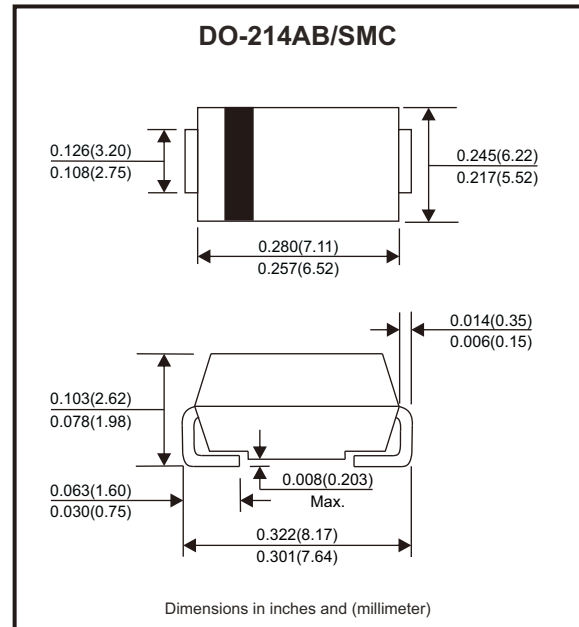


Features

- Low profile package.
- Ideal for automated placement.
- Low reverse current.
- Fast reverse recovery time.
- AEC-Q101 Qualified.

Mechanical data

- Case: DO-214AB/SMC, molded plastic.
- Epoxy: UL flammability classification rating 94V-0.
- Terminals: Lead free plating (Tin finish)
solderable per MIL-STD-202, method 208.
- Polarity: Cathode band.



Circuit Diagram



Maximum Ratings and Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	ACSFC1007-HF	Units
Max. repetitive peak reverse voltage	V _{RRM}	600	V
Max. RMS voltage	V _{RMS}	420	V
Max. DC blocking voltage	V _{DC}	600	V
Max. average forward rectified current	I _F	10	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	150	A
Max. instantaneous forward voltage I _F =10A @25°C	V _F	1.75	V
Max. DC reverse current @ T _A =25°C at rated DC blocking voltage @ T _A =100°C	I _R	10 500	μA
Max. reverse recovery time (Note 1)	T _{rr}	35	ns
Typical junction capacitance (Note 2)	C _j	65	pF
Typical thermal resistance	R _{θJL}	8	°C/W
Operating temperature range	T _J	-55 to +175	°C
Storage temperature range	T _{STG}	-55 to +175	°C

Notes: 1. Measured with I_F=0.5A, I_R=1A, I_{RR}=0.25A.
2. Measured at 1MHz and applied reverse voltage of 4.0V DC.

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

REV:A

Rating and Characteristic Curves (ACSFC1007-HF)

Fig.1 - Typical Forward Current Derating Curve

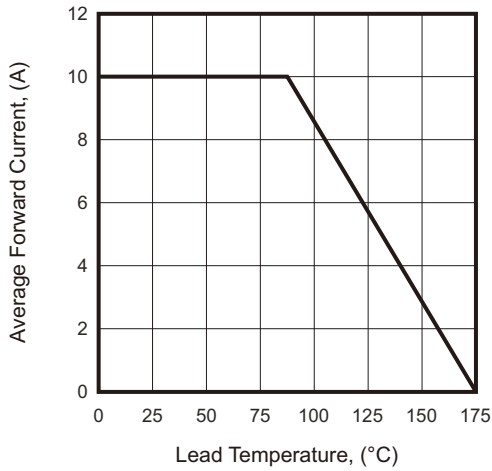


Fig.2 - Typical Forward Characteristics

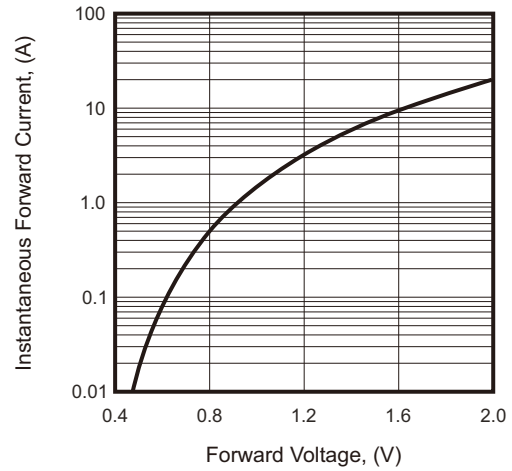


Fig.3 - Maximum Non-Repetitive Forward Surge Current

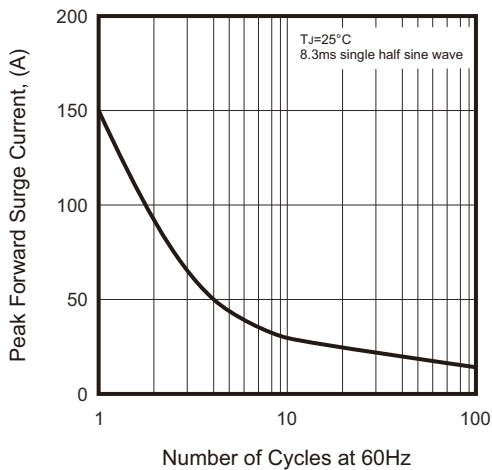


Fig.4 - Typical Reverse Characteristics

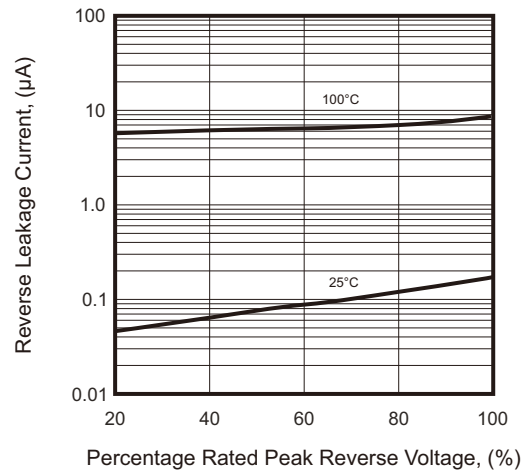
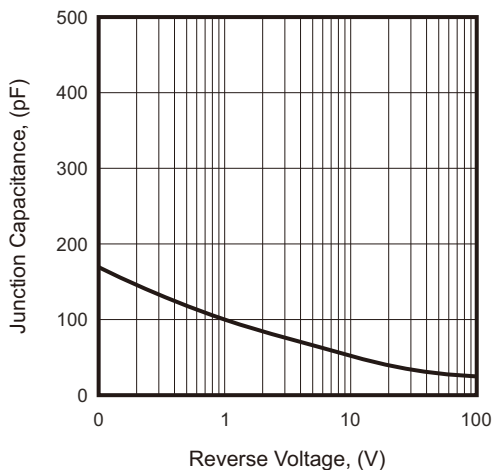


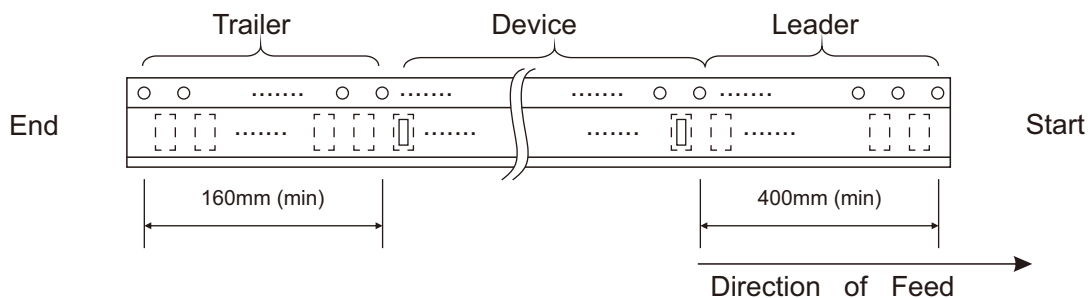
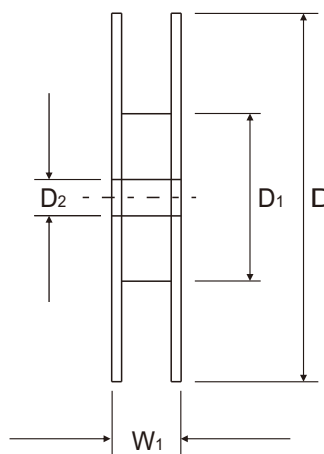
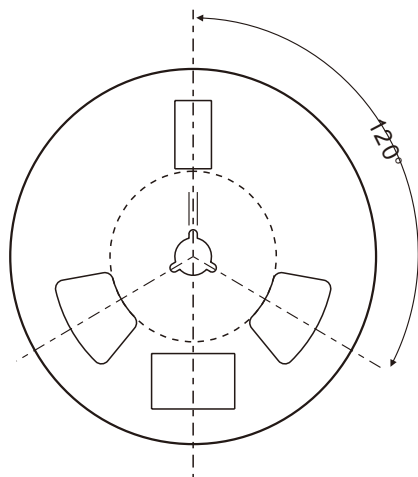
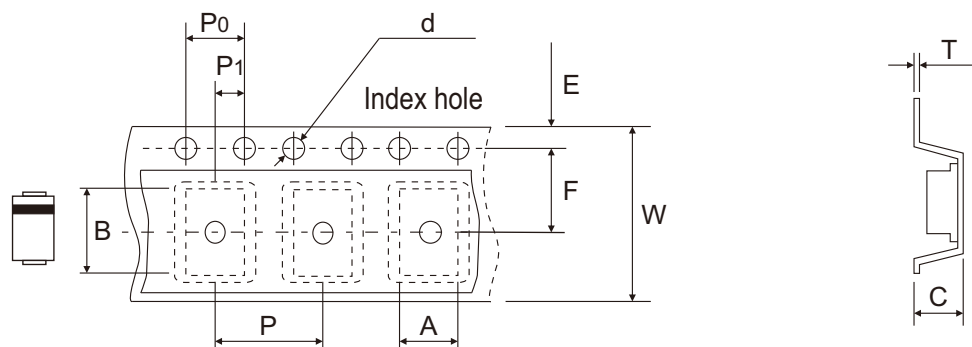
Fig.5 - Typical Junction Capacitance



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REV:A

Reel Taping Specification



DO-214AB (SMC)	SYMBOL	A	B	C	d	D	D1	D2
	(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	12.992 ± 0.079	1.969 MIN.	0.531 ± 0.039

DO-214AB (SMC)	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	7.50 ± 0.10	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.6 MAX.	16.00 ± 0.30	22.40 MAX.
	(inch)	0.069 ± 0.004	0.295 ± 0.004	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.024 MAX.	0.630 ± 0.012	0.882 MAX.

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Marking Code

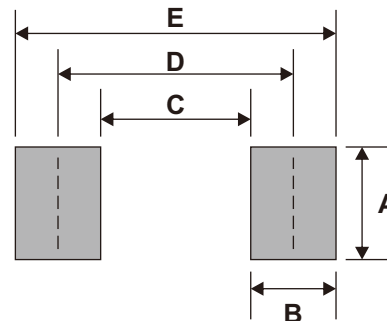
Part Number	Marking Code
ACSFC1007-HF	SFM1008C



█ : Cathode band

Suggested P.C.B. 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