

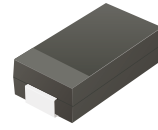
CSFB203-HF

Reverse Voltage: 200 V

Forward Current: 2.0 A

RoHS Device

Halogen Free

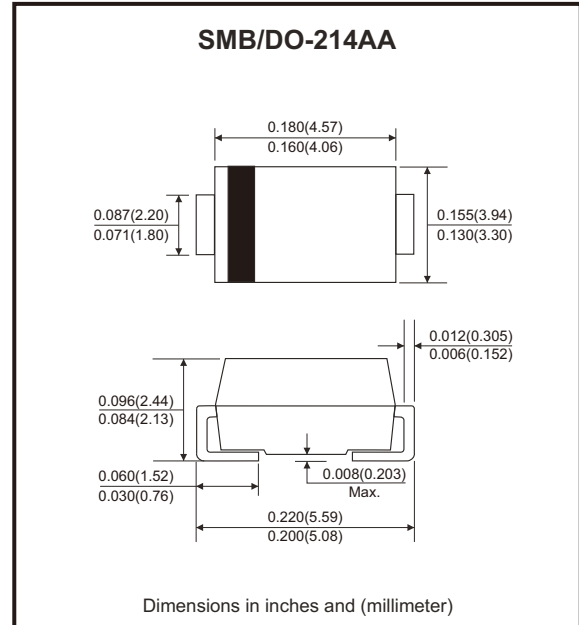


Features

- The plastic package carries underwriters laboratory.
- Idea for printed circuit board.
- Glass passivated junction chip.
- Low reverse leakage.
- High forward surge current capability.
- High temperature soldering guaranteed 250°C/10 seconds at terminals.

Mechanical data

- Case: SMB/DO-214AA, molded plastic.
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Mounting position: Any.



Circuit Diagram



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 current derate by 20%.

Parameter	Symbol	CSFB203-HF	Units
Max. repetitive peak reverse voltage	V_{RRM}	200	V
Max. RMS voltage	V_{RMS}	140	V
Max. DC blocking voltage	V_{DC}	200	V
Max. average forward rectified current at $T_L=100^\circ\text{C}$	$I_{(AV)}$	2	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50	A
Max. instantaneous forward voltage at 2A	V_F	0.95	V
Max. DC reverse current at rated DC blocking voltage	I_R	5 500	μA
			$T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$
Max. reverse recovery time (Note 1)	T_{rr}	35	ns
Typ. junction capacitance (Note 2)	C_J	55	pF
Typ. thermal resistance	$R_{\theta JA}$	85	$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Notes: 1. Reverse recovery time test condition: $I_F=0.5\text{A}$ $I_R=1\text{A}$ $I_{rr}=0.25\text{A}$.

2. Measured at 1MHz and applied reverse voltage of 4V D.C.

Rating and Characteristic Curves (CSFB203-HF)

Fig.1 - Derating Curve Output Rectified Current

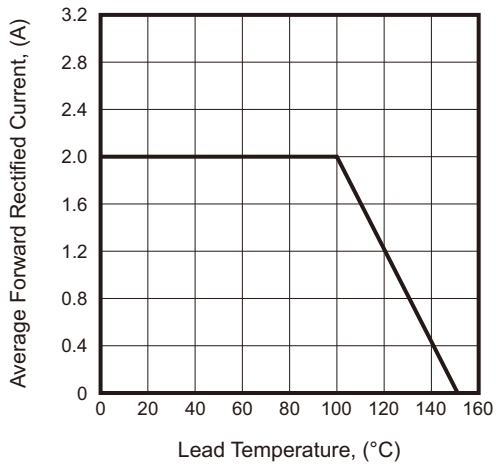


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

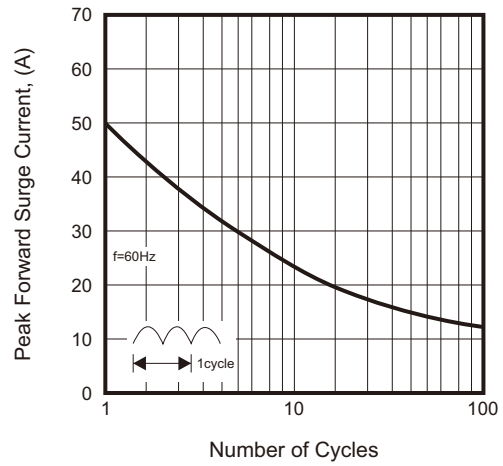


Fig.3 - Typical Forward Voltage Characteristics

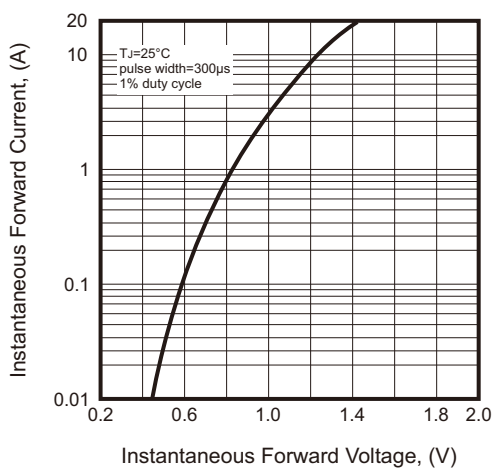
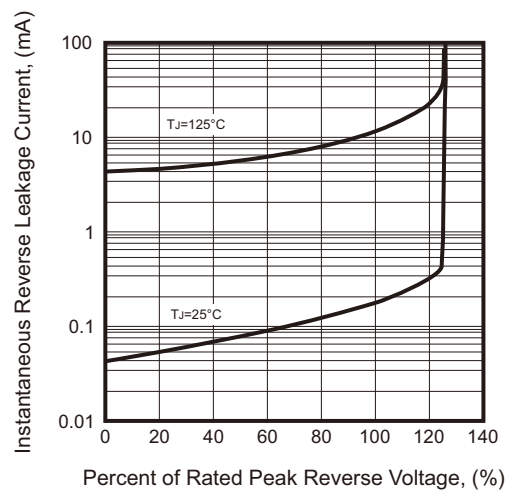
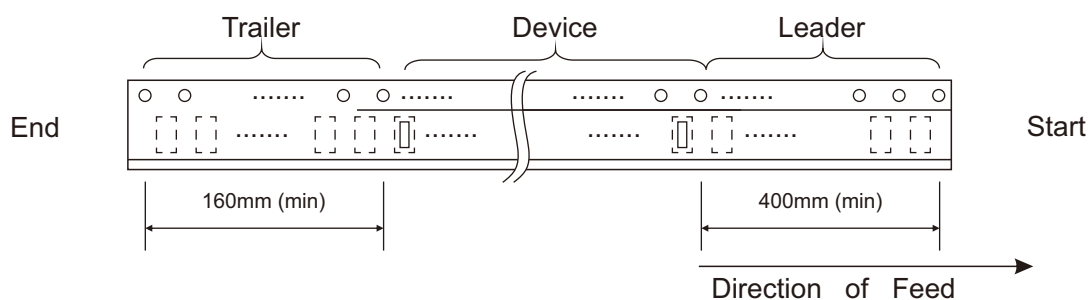
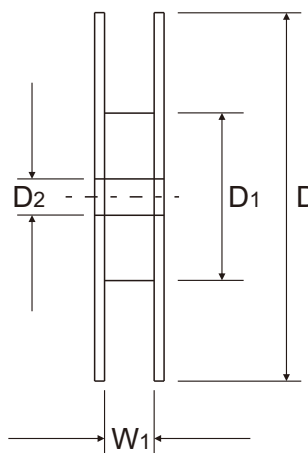
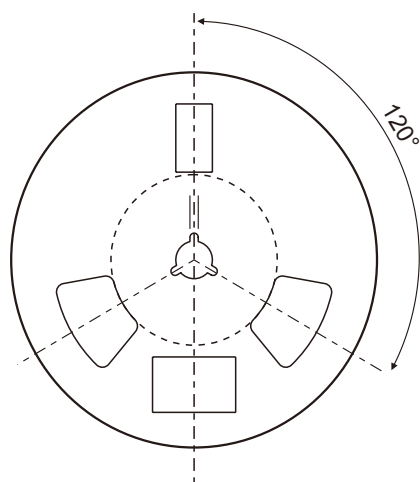
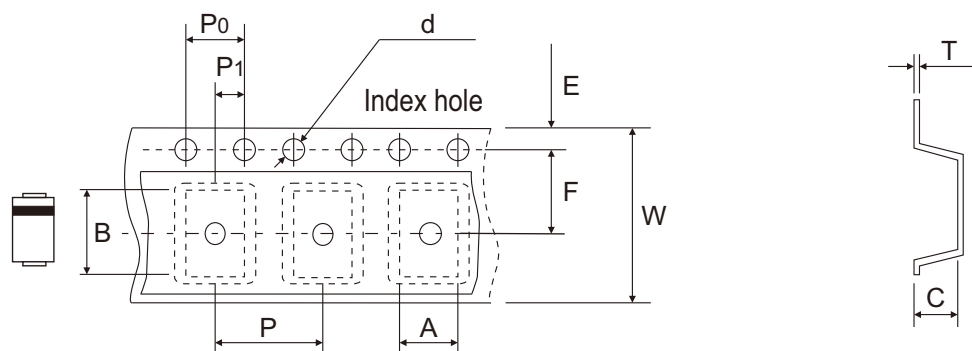


Fig.4 - Typical Reverse Leakage Characteristics



Reel Taping Specification

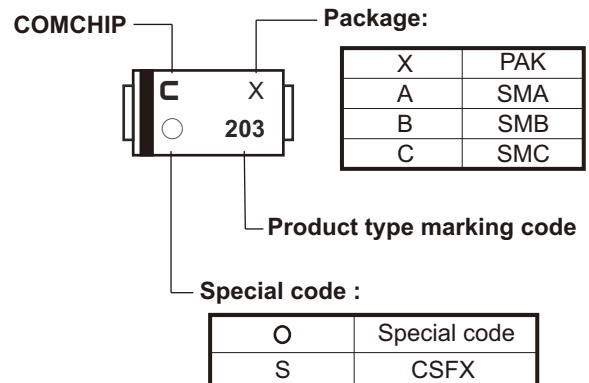


DO-214AA (SMB)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.80 ± 0.20	5.40 ± 0.20	2.45 ± 0.20	1.55 ± 0.20	330.00 ± 2.00	75.00 ± 2.00	13.50 ± 2.00
	(inch)	0.150 ± 0.008	0.213 ± 0.008	0.096 ± 0.008	0.061 ± 0.008	12.992 ± 0.079	2.953 ± 0.079	0.531 ± 0.079

DO-214AA (SMB)	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.20	5.50 ± 0.20	8.00 ± 0.20	4.00 ± 0.20	2.00 ± 0.20	0.25 ± 0.20	12.00 ± 0.20	13.50 ± 2.00
	(inch)	0.069 ± 0.008	0.217 ± 0.008	0.315 ± 0.008	0.157 ± 0.008	0.079 ± 0.008	0.010 ± 0.008	0.472 ± 0.008	0.531 ± 0.079

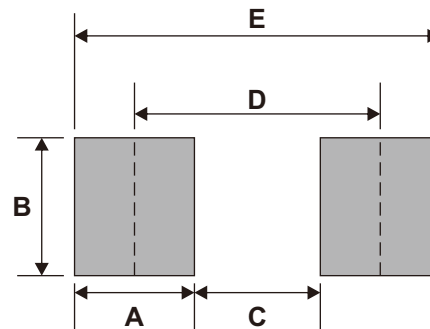
Marking Code

Part Number	Marking Code
CSFB203-HF	203



Suggested P.C.B. PAD Layout

SIZE	SMB/DO-214AA	
	(mm)	(inch)
A	2.00	0.079
B	2.30	0.091
C	2.10	0.083
D	4.10	0.161
E	6.10	0.240



Standard Packaging

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