

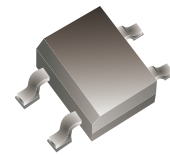
ABS210-HF

Reverse Voltage: 1000 V

Forward Current: 2.0 A

RoHS Device

Halogen Free



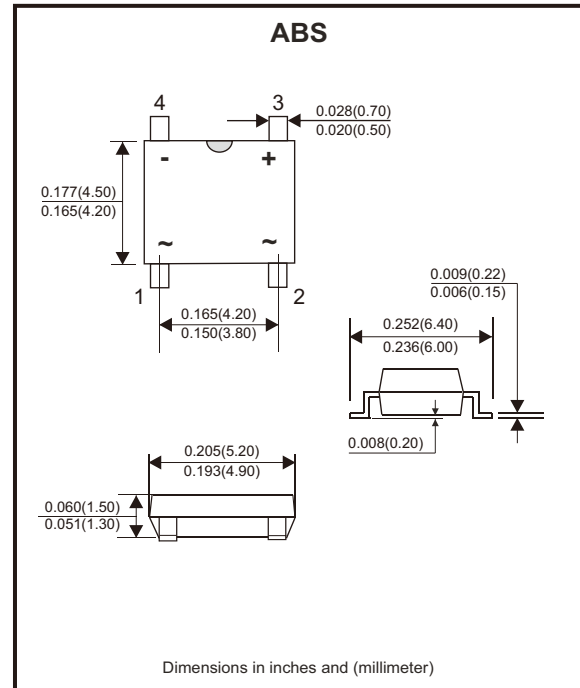
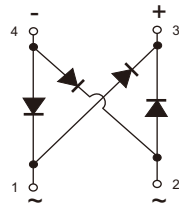
Features

- High surge current capability.
- Designed for surface mount application.

Mechanical data

- Case: ABS, molded plastic.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Symbol molded on body.

Circuit Diagram



Maximum Rating and Electrical Characteristics

Rating at $T_A=25^\circ\text{C}$, unless otherwise noted.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Parameter	Symbol	ABS210-HF	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC blocking voltage	V_{DC}	1000	V
Average rectified output current at $T_C=115^\circ\text{C}$	I_O	2.0	A
Peak forward surge current, 8.3ms single half sine-wave, superimposed on rated load (JEDEC Method)	I_{FSM}	55	A
Forward voltage per element @ $I_F=2.0\text{A}$	V_F	1.0	V
Maximum DC reverse current @ $T_J=25^\circ\text{C}$ at rated DC blocking voltage @ $T_J=125^\circ\text{C}$	I_R	5.0 100	μA
Typical junction capacitance (Note 1)	C_j	25	pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	60	$^\circ\text{C/W}$
	$R_{\theta JC}$	16	
Operating and storage temperature range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Notes: 1. Mounted at 1MHz and applied reverse voltage of 4V D.C.
2. Mounted on glass epoxy PC board with 4 x 1.5" x 1.5" (3.81 x 3.81 cm) copper pad.

Typical Rating and Characteristic Curves (ABS210-HF)

Fig.1 - Average Rectified Output Current Derating Curve

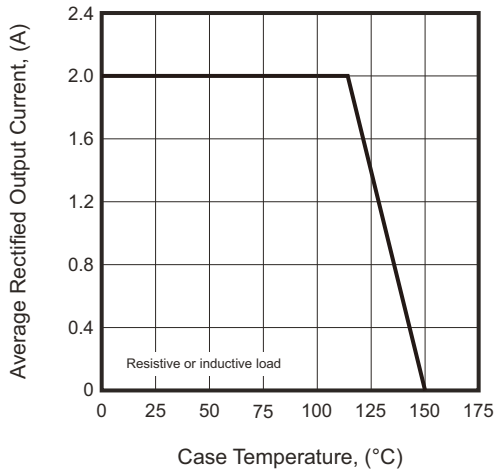


Fig.2 - Typical Reverse Characteristics

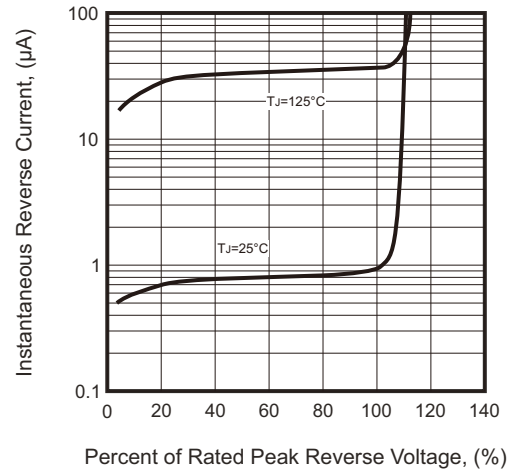


Fig.3 - Typical Instantaneous Forward Characteristics

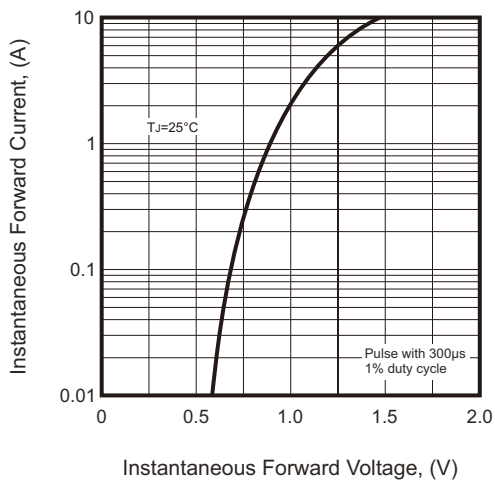


Fig.4 - Typical Junction Capacitance

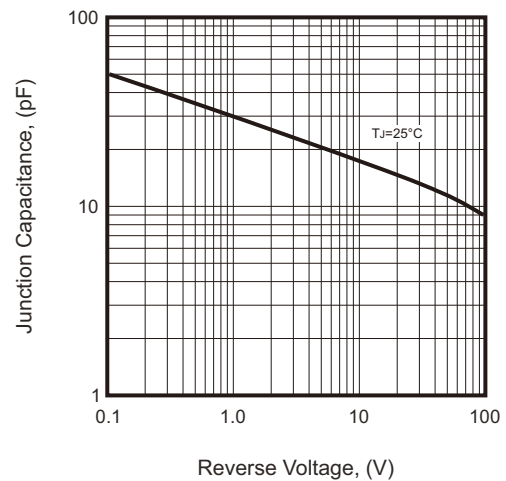
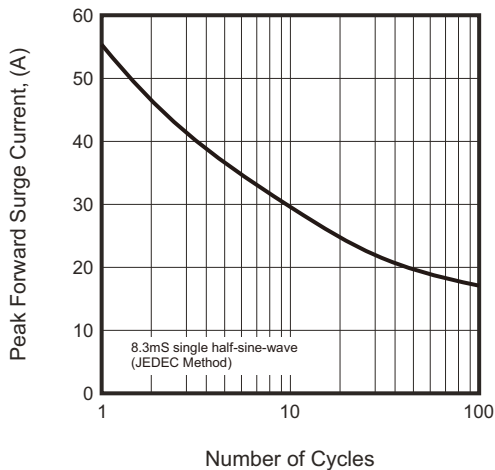
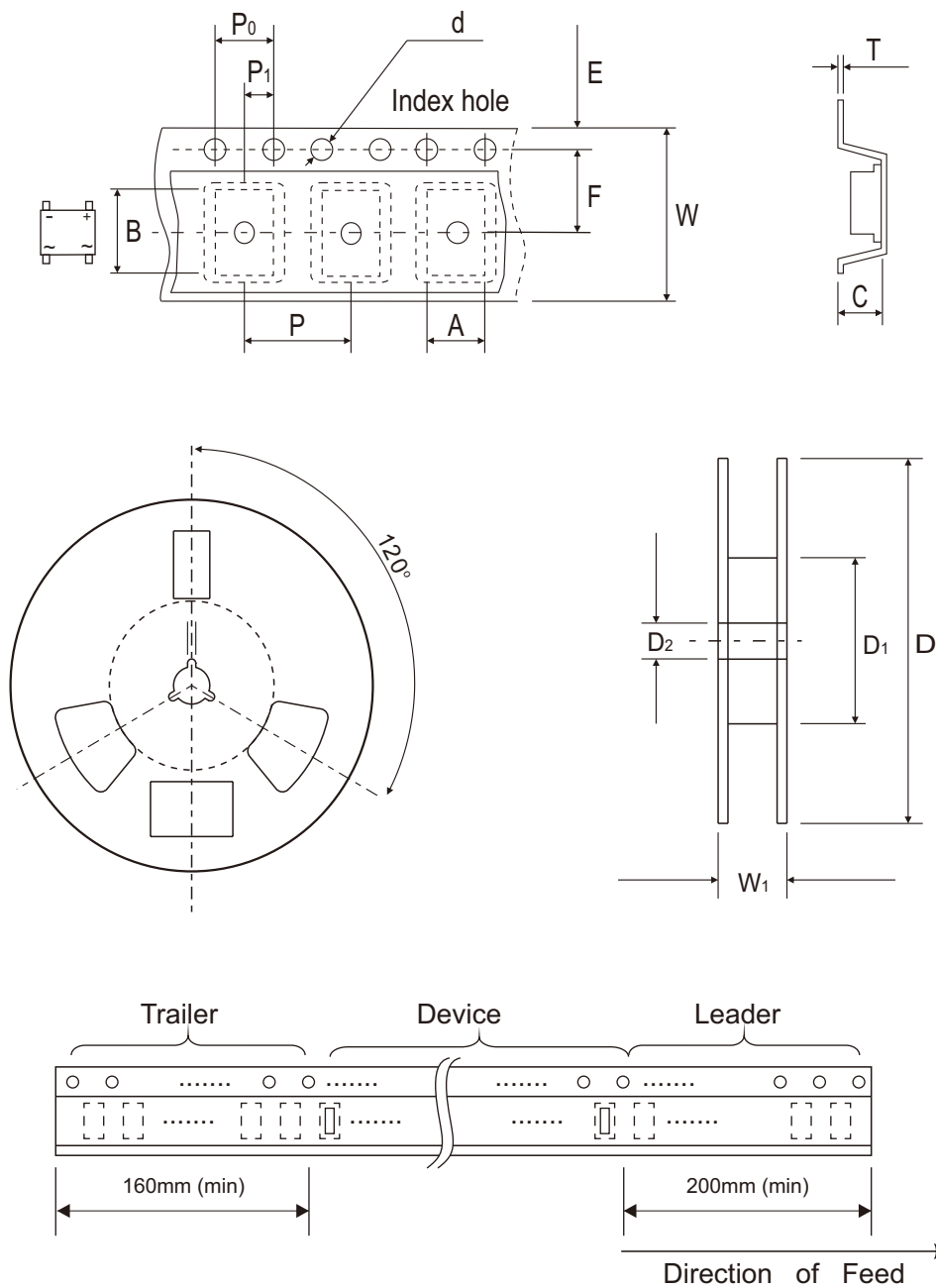


Fig.5 - Max. Non-Repetitive Peak Forward Surge Current



Reel Taping Specification

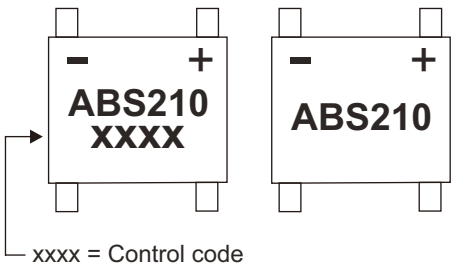


ABS	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	5.31 ± 0.10	6.70 ± 0.10	1.59 ± 0.10	1.50 ± 0.10	330.00 ± 2.00	75.00 ± 1.00	13.00 ± 0.20
	(inch)	0.209 ± 0.004	0.264 ± 0.004	0.063 ± 0.004	0.059 ± 0.004	12.992 ± 0.079	2.953 ± 0.039	0.512 ± 0.008

ABS	SYMBOL	E	F	P	P ₀	P ₁	T	W	W ₁
	(mm)	1.75 ± 0.10	5.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.26 ± 0.05	12.00 ± 0.30	14.70 + 2.00 - 1.00
	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.010 ± 0.002	0.472 ± 0.012	0.579 + 0.079 - 0.039

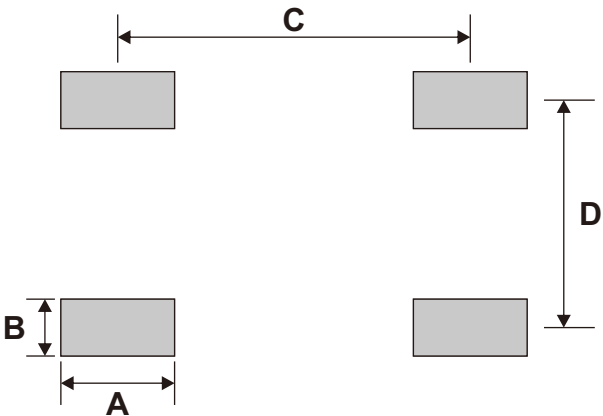
Marking Code

Part Number	Marking code
ABS210-HF	ABS210



Suggested P.C.B. PAD Layout

SIZE	ABS	
	(mm)	(inch)
A	2.00	0.079
B	1.00	0.039
C	6.20	0.244
D	4.00	0.157



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
ABS	5,000	13