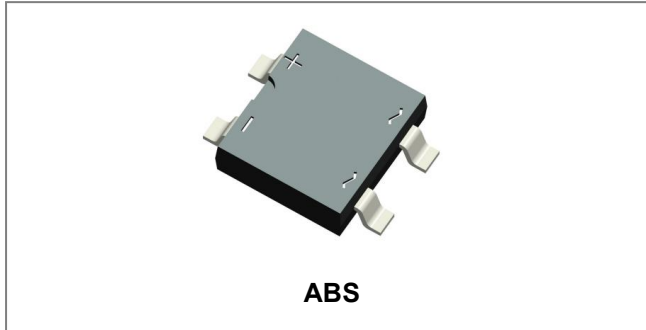




# THE DATASHEET OF ABS210



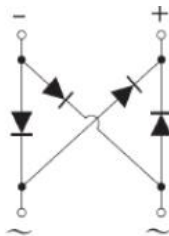
**ABS22 THRU ABS210  
SINGLE PHASE 2.0A MP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER**



**Features**

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0
- This is a Pb – Free Device
- “-HF” suffix is for Halogen Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

**Circuit Diagram**



**Mechanical Data**

- Case: SOPA-4, Molded plastic ABS
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting Position: Any

**Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified**

Single Phase half wave 60Hz, resistive or inductive load. For capacitive load current derate by 20%.

Type Number	Symbol	ABS22	ABS24	ABS26	ABS28	ABS210	Unit	
ABS22-HF THRU ABS210-HF Marking Code		ABS22H	ABS24H	ABS26H	ABS28H	ABS210H		
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>							
Working Peak Reverse Voltage	V <sub>RWM</sub>	200	400	600	800	1000	V	
DC Blocking Voltage	V <sub>DC</sub>							
RMS Reverse Voltage	V <sub>RMS</sub>	140	280	420	560	700	V	
Average Rectified Output Current @T <sub>C</sub> =100°C	I <sub>O</sub>	2.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	60						A
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	I <sup>2</sup> t	15						A <sup>2</sup> s

**Electrical Characteristics:**

Type Number	Symbol	ABS22	ABS24	ABS26	ABS28	ABS210	Unit	
ABS22-HF THRU ABS210-HF Marking Code		ABS22H	ABS24H	ABS26H	ABS28H	ABS210H		
Forward Voltage (per element) @ $I_F = 1.0A$ @ $I_F = 2.0A$	$V_F$	0.95 1.00						V
Peak Reverse Current @ $T_A = 25^\circ C$ At Rated DC Blocking Voltage @ $T_A = 125^\circ C$	$I_R$	5.0 200						$\mu A$

\* Pulse width < 300  $\mu s$ , duty cycle < 2%

**Thermal-Mechanical Specifications:**

Type Number	Symbol	ABS22	ABS24	ABS26	ABS28	ABS210	Unit	
ABS22-HF THRU ABS210-HF Marking Code		ABS22H	ABS24H	ABS26H	ABS28H	ABS210H		
Typical Thermal Resistance (per leg)	$R_{\theta JA}$ $R_{\theta JL}$	62.5 25						$^\circ C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150						$^\circ C$

**Ratings and Characteristics Curves**

FIG.1 FORWARD CURRENT DERATING CURVE

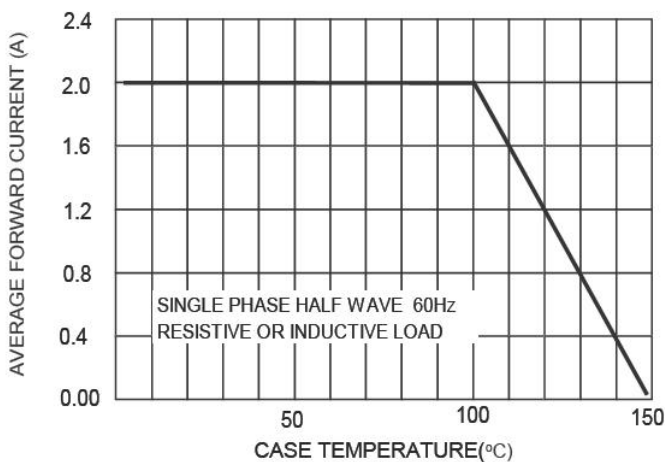
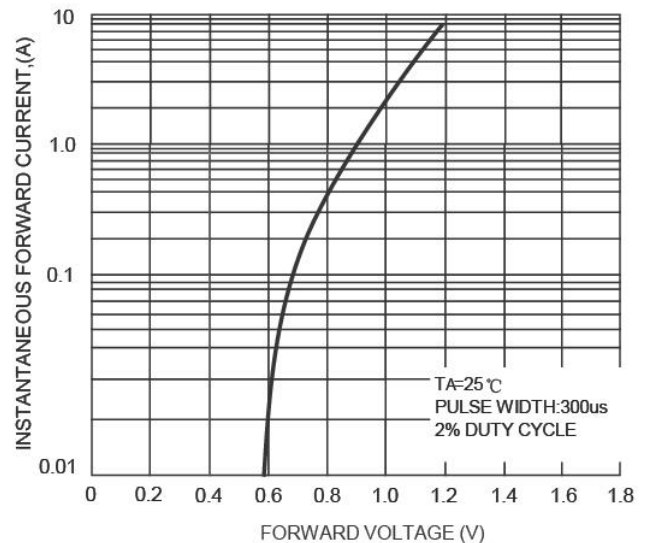
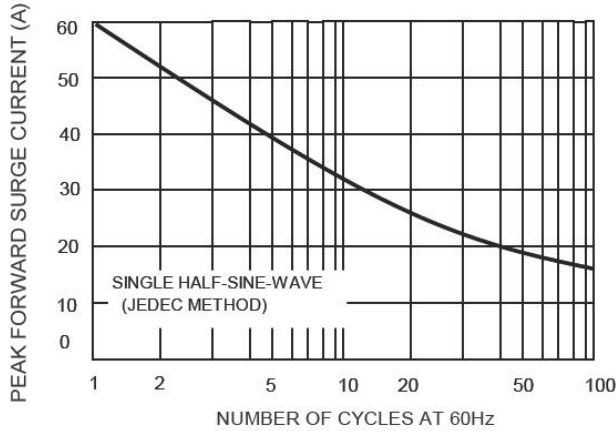


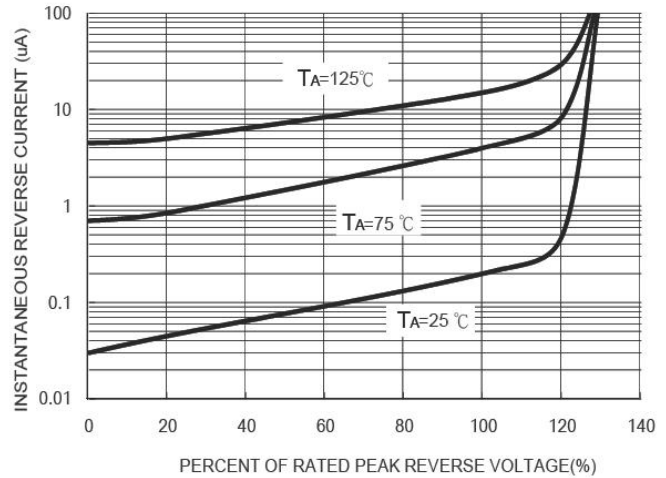
FIG.2 TYPICAL FORWARD CHARACTERISTICS



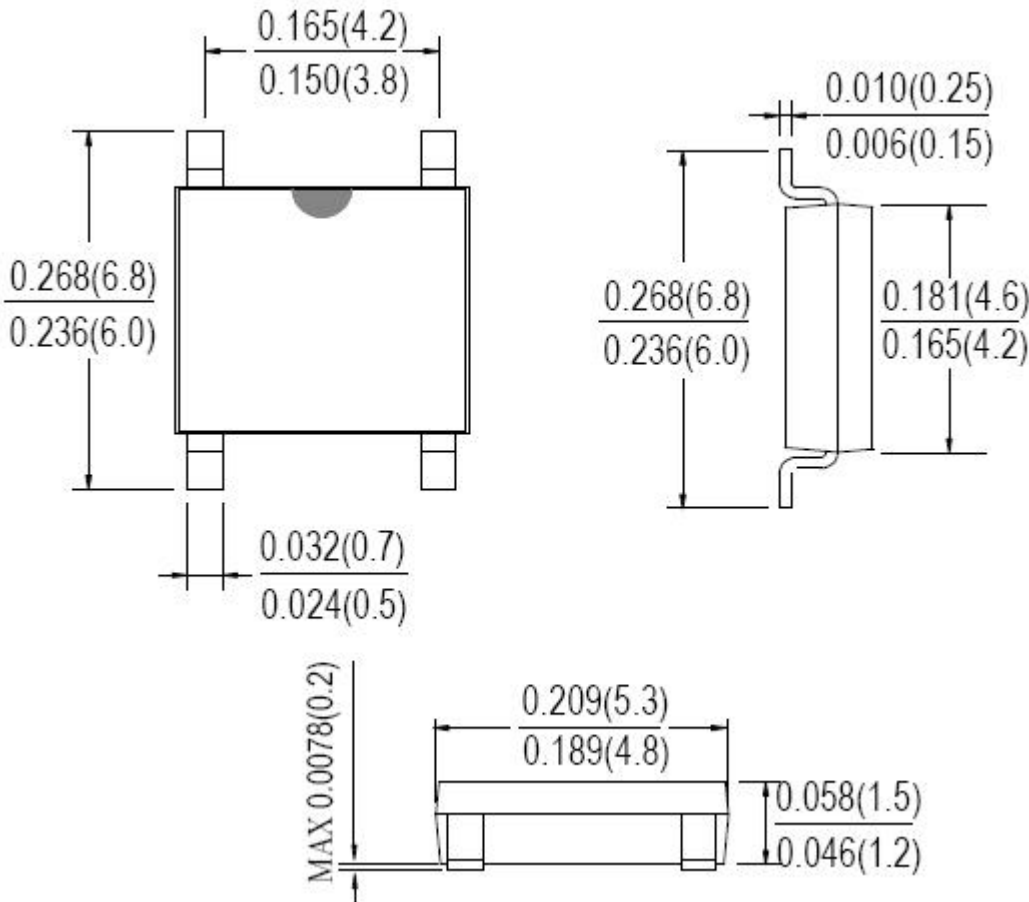
**FIG.3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG. 4 TYPICAL REVERSE CHARACTERISTICS**



**Mechanical Dimensions ABS(Inches/Millimeters)**

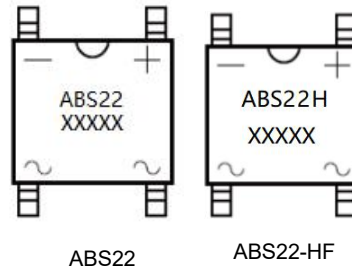


## Ordering Information

Device	Package	Plating	Shipping
ABS22 THRU ABS210	ABS	Pure Sn	5000pcs / reel
ABS22TR THRU ABS210TR	ABS	Pure Sn	5000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

## Marking Diagram

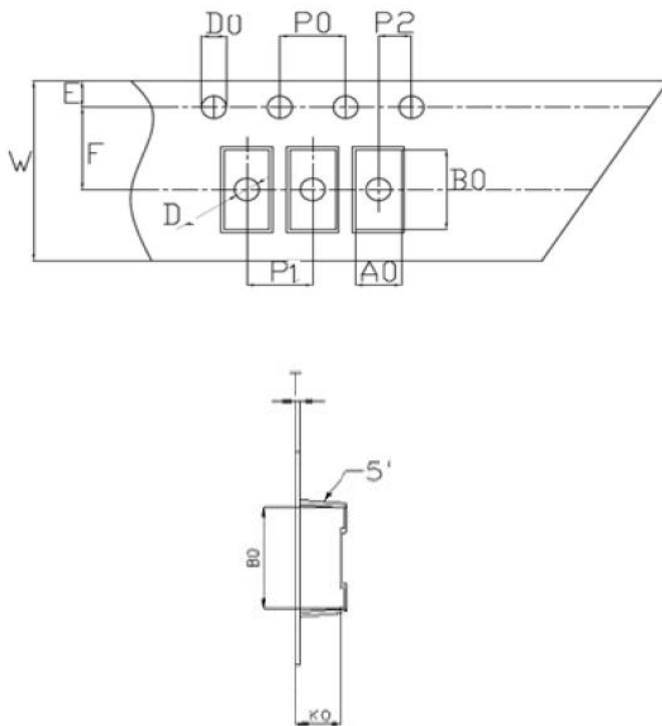


Where XXXXX is YYWWL

ABS22        = Type Number  
ABS22H      = Marking Code  
YY            = Year  
WW          = Week  
L             = Lot Number

**Cautions:** Molding resin  
Epoxy resin UL:94V-0

## Carrier Tape & Reel Specification ABS



SYMBOL	Millimeters	
	Min.	Max.
A0	5.21	5.41
B0	7.10	7.30
D0	1.50	1.60
D1	1.40	1.60
P0	3.90	4.10
P1	7.90	8.10
P2	1.95	2.05
E	1.65	1.85
K0	1.55	1.75
F	5.45	5.55
W	11.90	12.10
T	0.24	0.30
10P0	39.80	40.20

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