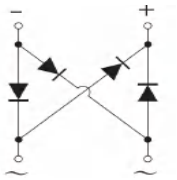
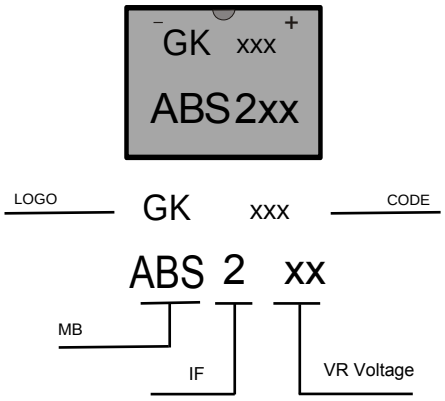
## FEATURES

* Ideal for printed circuit board
* Reliable low cost construction utilizing molded plastic technique
* High surge current capability
* Polarity: Symbol molded on body
* Mounting position: Any
* Weight: 0.12 grams

VOLTAGE RANGE
50 to 1000 Volts
CURRENT
2.0 Ampere



Internal Schematic




## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| TYPE NUMBER | ABS205 | ABS21 | ABS22 | ABS24 | ABS26 | ABS28 | ABS210 | UNITS |
|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current | 2.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 6 0 | | | | | | | A |
| $I^2t$ Rating for Fusing (1ms < t < 8.3ms) | 14.9 | | | | | | | $A^2S$ |
| Maximum Forward Voltage Drop per Bridge Element at 1.0A D.C. | 1.0 | | | | | | | V |
| Maximum DC Reverse Current Ta=25°C | 5.0 | | | | | | | μA |
| at Rated DC Blocking Voltage Ta=125°C | 500 | | | | | | | μA |
| Typical Thermal Resistance R JA (Note 2) | 75 | | | | | | | °C/W |
| Operating Temperature Range, TJ | -55 — +150 | | | | | | | °C |
| Storage Temperature Range, TSTG | -55 — +150 | | | | | | | °C |

NOTES: 1. Mounted on P.C. Board.
2. Thermal Resistance Junction to Ambient.

## RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

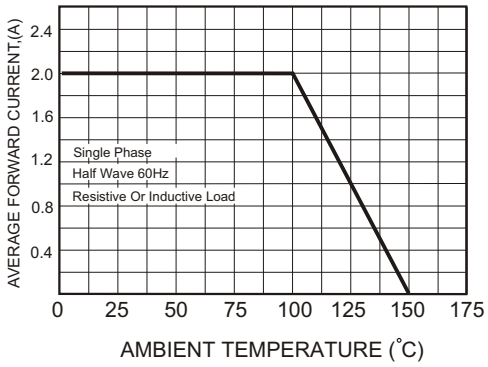



FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

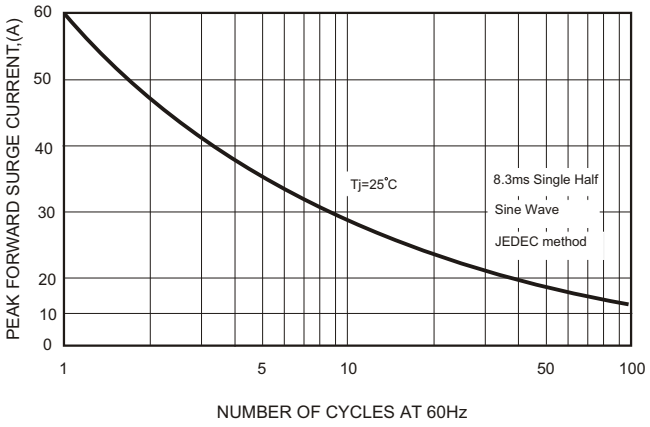



FIG.3-TYPICAL FORWARD CHARACTERISTICS

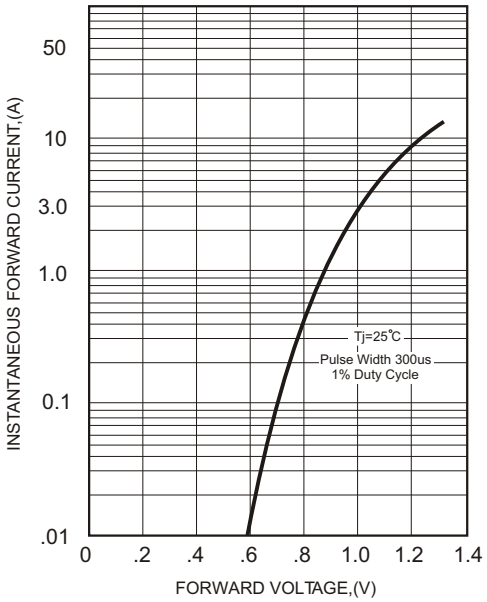
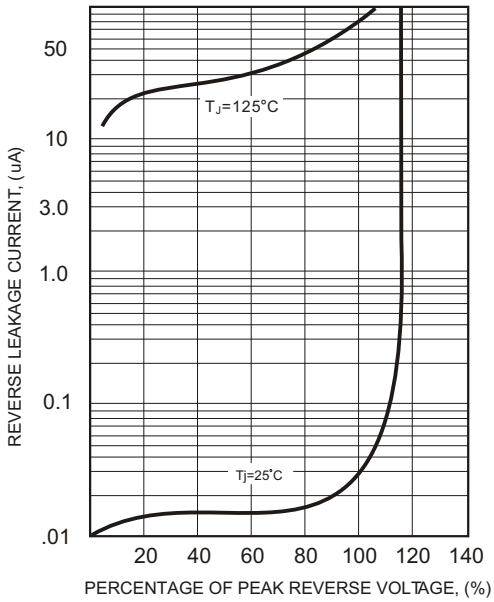


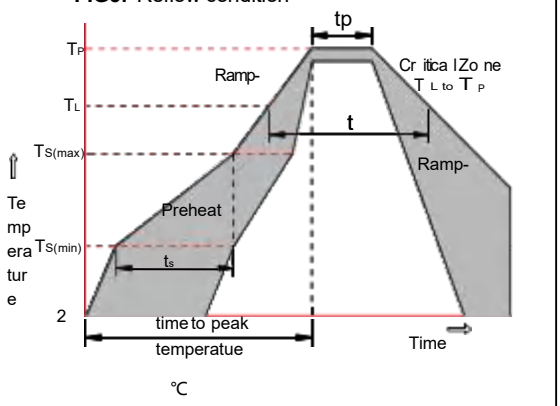

FIG.4-TYPICAL REVERSE CHARACTERISTICS



## Soldering parameters

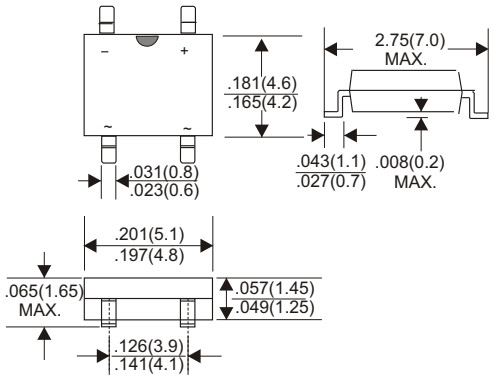
| Reflow Condition | | Pb-Free assembly (see as bellow) |
|---|---|---|
| Pre Heat | -Temperature Min ($T_{s(min)}$) | +150℃ |
| | -Temperature Max($T_{s(max)}$) | +200℃ |
| | -Time (Min to Max) (ts) | 60-180 secs. |
| Average ramp up rate (Liquid us Temp ($T_L$) to peak) | | 3℃/sec. Max |
| $T_{s(max)}$ to $T_L$ - Ramp-up Rate | | 3℃/sec. Max |
| Reflow | -Temperature($T_L$)(Liquid us) | +217℃ |
| | -Temperature($t_L$) | 60-150 secs. |
| Peak Temp ($T_p$) | | +260(+0/-5)℃ |
| Time within 5℃ of actual Peak Temp ($t_p$) | | 30 secs. Max |
| Ramp-down Rate | | 6℃/sec. Max |
| Time 25℃ to Peak Temp ($T_P$) | | 8 min. Max |
| Do not exceed | | +260℃ |

**FIG5:** Reflow condition

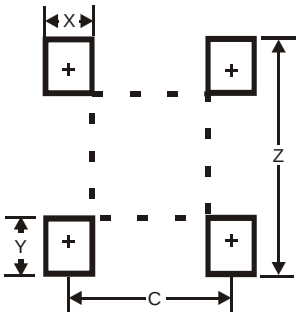



## Package Dimensions & Suggested Pad Layout

**ABS**



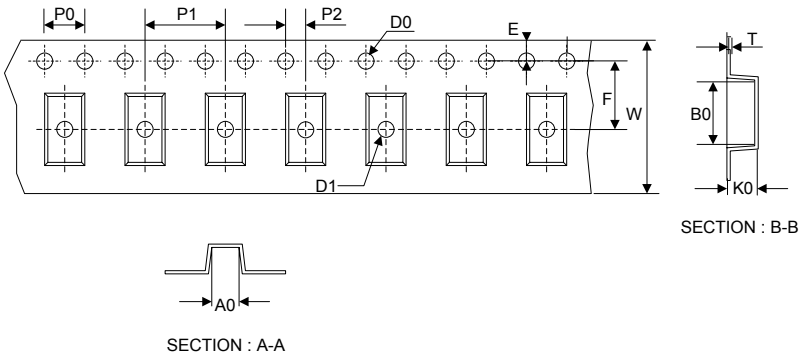

Dimensions in inches and (millimeters)




| Dimensions | |
|---|---|
| Z | 8.4 |
| X | 1.0 |
| Y | 2.2 |
| C | 4.0 |

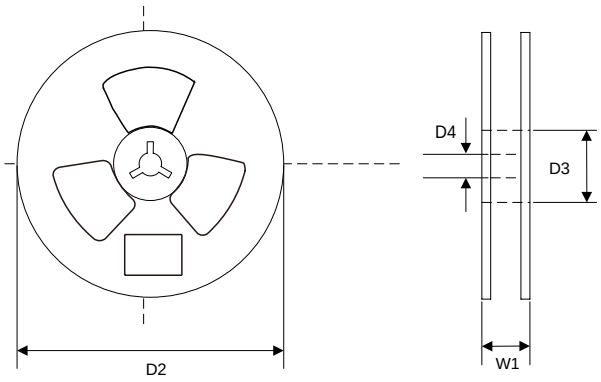
## Tape & rell specification

Tape




| Symbol | Dimension (mm) |
|---|---|
| P0 | 4.00±0.20 |
| P1 | 8.00±0.20 |
| P2 | 2.00±0.20 |
| D0 | 1.60±0.15 |
| D1 | 1.60±0.15 |
| E | 1.75±0.20 |
| F | 5.50±0.15 |
| W | 12.00±0.20 |
| A0 | 5.30±0.20 |
| B0 | 6.80±0.20 |
| K0 | 1.65±0.15 |
| T | 0.23±0.10 |

13” Reel




| | |
|---|---|
| D2 | 330.0±5.0 |
| D3 | 73Min. |
| D4 | 16.0±2.5 |
| W1 | 18.0±3.0 |
| Quantity: 5000PCS | |