

# BAS70WS

## SURFACE MOUNT SCHOTTKY DIODES

**VOLTAGE** 70 Volts **CURRENT** 0.2 Amperes

### FEATURES

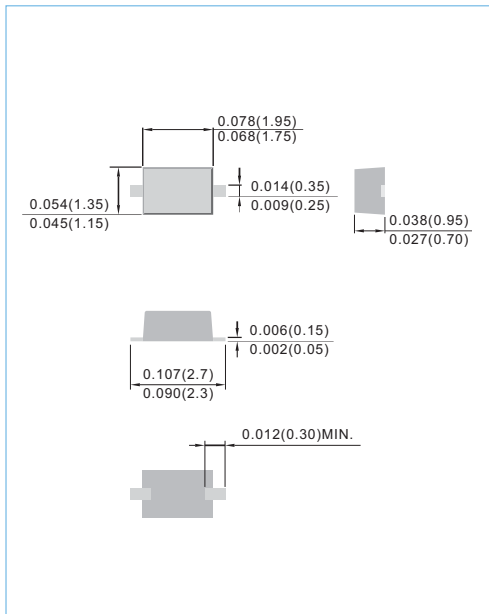
- Fast switching speed
- Surface mount package ideally suited for automatic insertion  
Electrical identical standard JEDEC
- High conductor
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: SOD-323, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0041 grams
- Marking: A70

**SOD-323**

Unit : inch(mm)



### ABSOLUTE RATINGS

| PARAMETER                                             | Symbol    | Value | Units |
|-------------------------------------------------------|-----------|-------|-------|
| Reverse Voltage                                       | $V_R$     | 70    | V     |
| Peak Reverse Voltage                                  | $V_{RRM}$ | 70    | V     |
| Average Rectified Current at Temp=25°C                | $I_R$     | 0.2   | A     |
| Non-repetitive Peak Forward Surge Current at t=1.0 ms | $I_{FSM}$ | 4     | A     |

### THERMAL CHARACTERISTICS

| PARAMETER                                | Symbol          | BAS70WS    | Units |
|------------------------------------------|-----------------|------------|-------|
| Power Dissipation                        | $P_{TOT}$       | 225        | mW    |
| Thermal Resistance , Junction to Ambient | $R_{\theta JA}$ | 556        | °C/W  |
| Junction Temperature                     | $T_J$           | 150        | °C    |
| Storage Temperature at Temp=25°C         | $T_{STG}$       | -55 to 150 | °C    |

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## ELECTRICAL CHARACTERISTICS

| PARAMETER                    | Symbol     | Test Condition                                                  | MIN. | TYP. | MAX.                 | Units         |
|------------------------------|------------|-----------------------------------------------------------------|------|------|----------------------|---------------|
| Reverse Breakdown Voltage    | $V_{(BR)}$ | $I_R=10\text{ }\mu\text{A}$                                     | 70   | --   | --                   | V             |
| Reverse Current              | $I_R$      | $V_R=70\text{ V}$<br>$V_R=50\text{ V}$                          | --   | --   | 1.0<br>0.1           | $\mu\text{A}$ |
| Forward Voltage              | $V_F$      | $I_F=1.0\text{ mA}$<br>$I_F=10\text{ mA}$<br>$I_F=15\text{ mA}$ | --   | --   | 0.41<br>0.75<br>1.00 | V             |
| Maximum Junction Capacitance | $C_J$      | $V_R=0\text{ V}$ , $f=1.0\text{ MHz}$                           | --   | --   | 2.0                  | pF            |

## ELECTRICAL CHARACTERISTICS CURVE

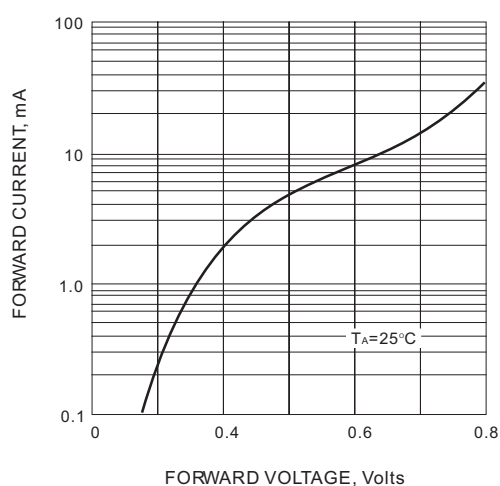


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

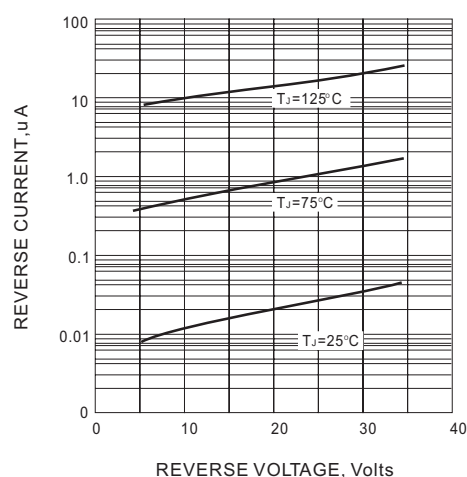


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

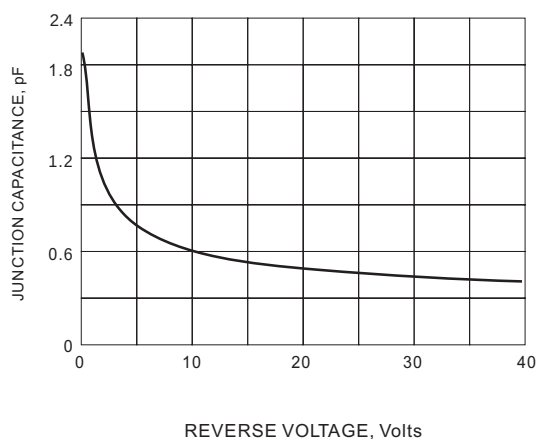


FIG. 3 TYPICAL JUNCTION CAPACITANCE

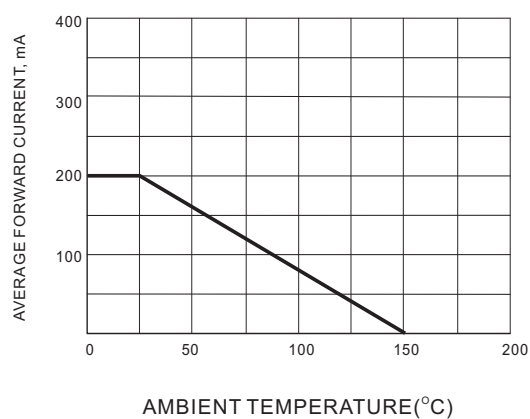
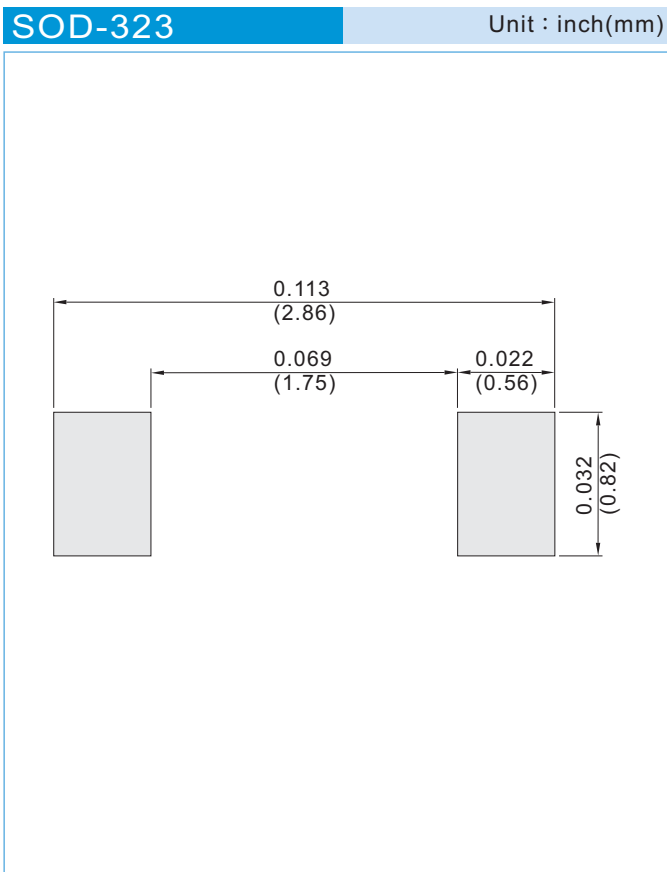


FIG. 4 FORWARD CURRENT DERATING

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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R - 12K per 13" plastic Reel
  - T/R - 5K per 7" plastic Reel

## LEGAL STATEMENT

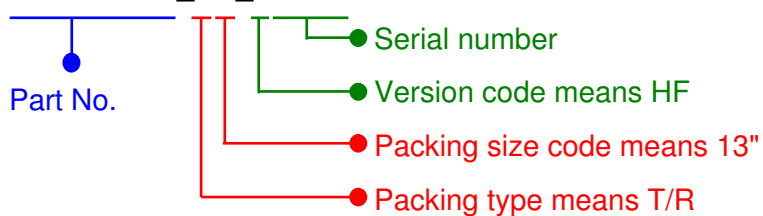
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## BAS70WS

For example :

**RB500V-40\_R2\_00001**



**Part No\_packing code\_Version**

**BAS70WS\_R1\_00001**

**BAS70WS\_R1\_10001**

**BAS70WS\_R2\_00001**

**BAS70WS\_R2\_10001**

| Packing Code <b>XX</b> |                      |                   |                      | Version Code <b>XXXXX</b> |                      |                                       |
|------------------------|----------------------|-------------------|----------------------|---------------------------|----------------------|---------------------------------------|
| Packing type           | 1 <sup>st</sup> Code | Packing size code | 2 <sup>nd</sup> Code | HF or RoHS                | 1 <sup>st</sup> Code | 2 <sup>nd</sup> ~5 <sup>th</sup> Code |
| T/B                    | <b>A</b>             | N/A               | <b>0</b>             | HF                        | <b>0</b>             | <b>serial number</b>                  |
| T/R                    | <b>R</b>             | 7"                | <b>1</b>             | RoHS                      | <b>1</b>             | <b>serial number</b>                  |
| B/P                    | <b>B</b>             | 13"               | <b>2</b>             |                           |                      |                                       |
| T/P                    | <b>T</b>             | 26mm              | <b>X</b>             |                           |                      |                                       |
| TRR                    | <b>S</b>             | 52mm              | <b>Y</b>             |                           |                      |                                       |
| TRL                    | <b>L</b>             | PBCU              | <b>U</b>             |                           |                      |                                       |
| FORMING                | <b>F</b>             | PBCD              | <b>D</b>             |                           |                      |                                       |