



BAS40 SERIES

SURFACE MOUNT SCHOTTKY DIODES

VOLTAGE 40 Volts **CURRENT** 0.2 Amperes

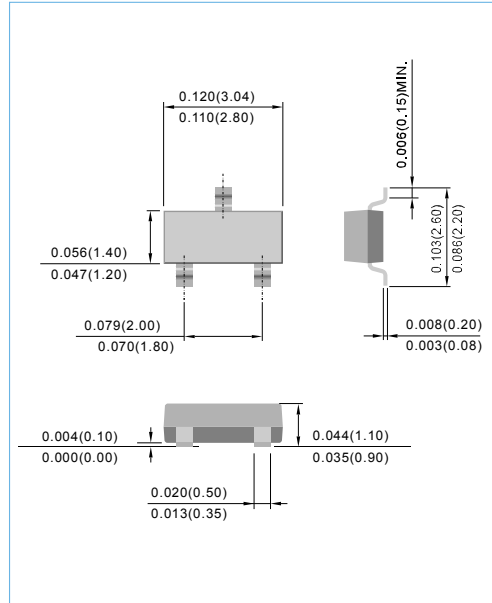
FEATURES

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
Electrical identical standard JEDEC
- High conductor
- Lead free in comply with EU RoHS 2011/65/EU directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOT-23, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0003 ounces, 0.0084 grams

SOT-23 Unit : inch(mm)

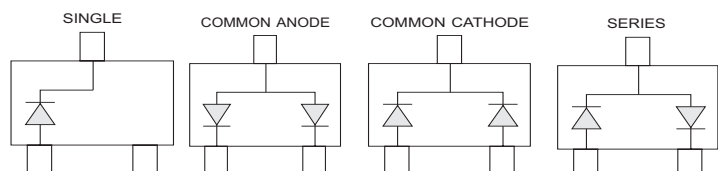


ABSOLUTE RATINGS

| PARAMETER | Symbol | BAS40 | BAS40A | BAS40C | BAS40S | Units |
|--|-------------|-------|--------|--------|--------|-------|
| Marking Code | | S40 | S42 | S43 | S44 | |
| Reverse Voltage | V_R | 40 | | | | V |
| Peak Reverse Voltage | V_{RRM} | 40 | | | | V |
| Average Rectified Current at Temp=25°C | $I_{F(AV)}$ | 0.2 | | | | A |
| Non-repetitive Peak Forward Surge Current at t=1.0 s | I_{FSM} | 0.6 | | | | A |

THERMAL CHARACTERISTICS

| PARAMETER | Symbol | BAS40 | BAS40A | BAS40C | BAS40S | 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 |
| Circuit Figure | | SINGLE | COMMON ANODE | COMMON CATHODE | SERIES | |





BAS40 SERIES

ELECTRICAL CHARACTERISTICS

| PARAMETER | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNITS |
|---------------------------|------------|---|------|------|----------------------|---------|
| Reverse Breakdown Voltage | $V_{(BR)}$ | $I_R=10 \mu A$ | 40 | -- | -- | V |
| Reverse Current | I_R | $V_R=25 V$ | -- | -- | 1.0 | μA |
| Forward Voltage | V_F | $I_F=1.0mA$ $I_F=10mA$ $I_F=40mA$ | -- | -- | 0.38 0.50 1.00 | V |
| Total Capacitance | C_T | $V_R=0V, f=1.0MHz$ | -- | -- | 5.0 | pF |

ELECTRICAL CHARACTERISTICS CURVE

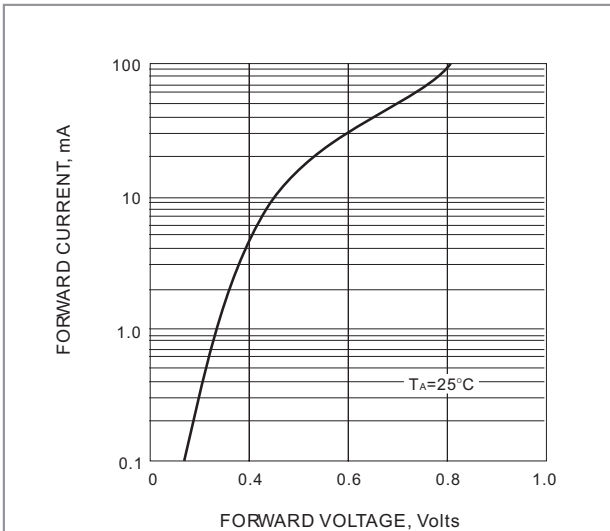


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

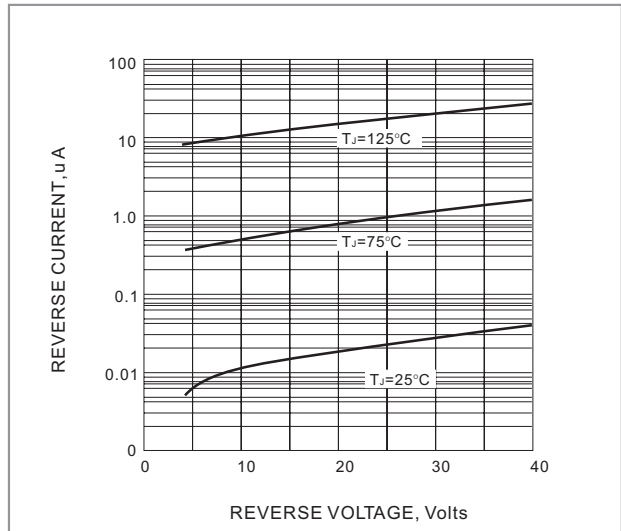


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

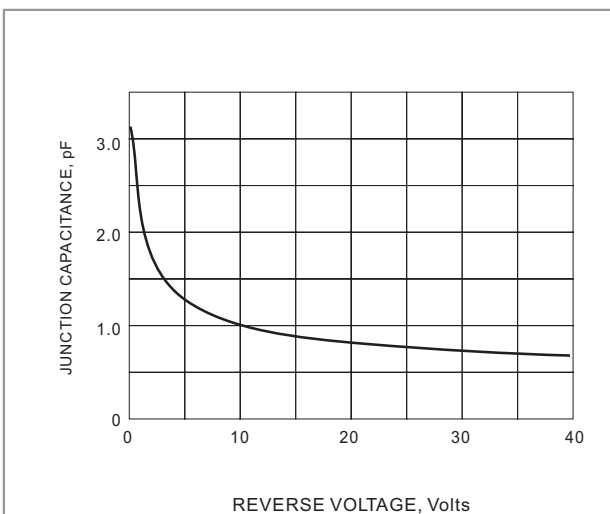


FIG. 3 TYPICAL JUNCTION CAPACITANCE

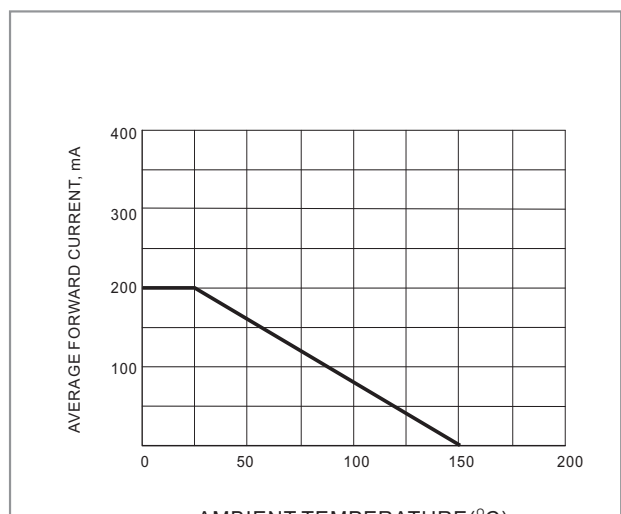
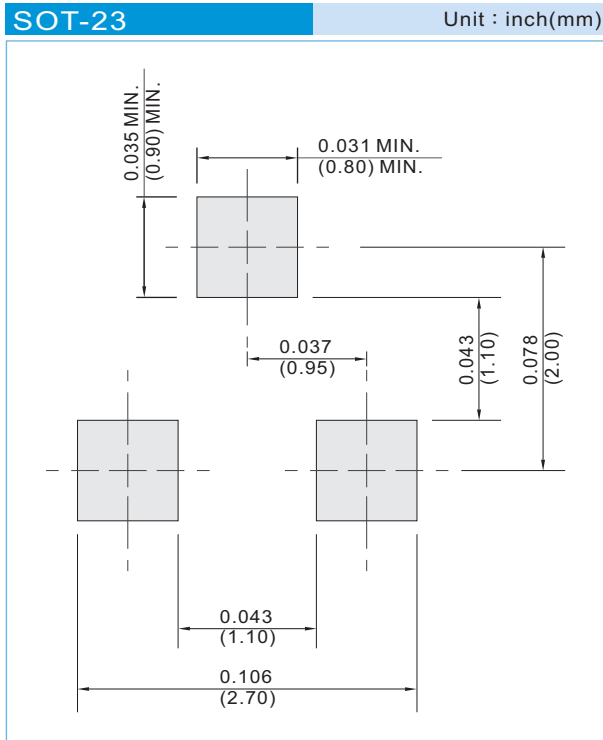


FIG. 4 FORWARD CURRENT DERATING



BAS40 SERIES

MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel



BAS40 SERIES

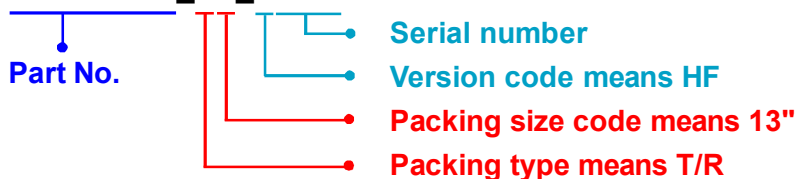
Part No_packing code_Version

BAS40_R1_00001

BAS40_R2_00001

For example :

RB500V-40_R2_00001



| Packing Code XX | | | | Version Code XXXXX | | |
|--------------------------------------|----------------------|----------------------------------|----------------------|---------------------------|----------------------|---------------------------------------|
| Packing type | 1 st Code | Packing size code | 2 nd Code | HF or RoHS | 1 st Code | 2 nd ~5 th Code |
| Tape and Ammunition Box (T/B) | A | N/A | 0 | HF | 0 | serial number |
| Tape and Reel (T/R) | R | 7" | 1 | RoHS | 1 | serial number |
| Bulk Packing (B/P) | B | 13" | 2 | | | |
| Tube Packing (T/P) | T | 26mm | X | | | |
| Tape and Reel (Right Oriented) (TRR) | S | 52mm | Y | | | |
| Tape and Reel (Left Oriented) (TRL) | L | PANASERT T/B CATHODE UP (PBCU) | U | | | |
| FORMING | F | PANASERT T/B CATHODE DOWN (PBCD) | D | | | |



BAS40 SERIES

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.