

Silicon Diode

BYVB32-150

Fast Efficient Rectifier

150V / 18A

DATASHEET

from

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OEM – General Semiconductor

Source: General Semiconductor Databook 1998

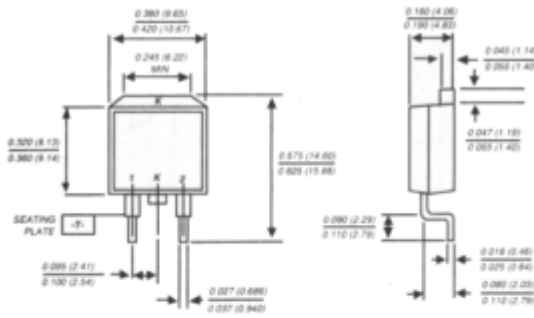
NEW PRODUCT NEW PRODUCT NEW PRODUCT

BYVB32-50 THRU BYVB32-200

FAST EFFICIENT PLASTIC RECTIFIER

Reverse Voltage - 50 to 150 Volts Forward Current - 18.0 Amperes

TO-263AB



Dimensions in inches and (millimeters)

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Dual rectifier construction, positive centertap
- ◆ Glass passivated chip junctions
- ◆ Low power loss
- ◆ Low forward voltage, high current capability
- ◆ High surge capability
- ◆ Superfast recovery time for high efficiency
- ◆ High temperature soldering in accordance with CECC 802 / Reflow guaranteed



MECHANICAL DATA

Case: JEDEC TO-263AB molded plastic body
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: As marked
Mounting Position: Any
Weight: 0.08 ounce, 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

| | SYMBOLS | BYVB32-50 | BYVB32-100 | BYVB32-150 | BYVB32-200 | UNITS |
|--|-----------------------------------|---------------|------------|------------|------------|-------|
| Maximum repetitive peak reverse voltage | VRRM | 50 | 100 | 150 | 200 | Volts |
| Maximum RMS voltage | VRMS | 35 | 70 | 105 | 140 | Volts |
| Maximum DC blocking voltage | VDC | 50 | 100 | 150 | 200 | Volts |
| Maximum average forward rectified current at T _C =120°C | I _(AV) | 18.0 | | | | Amps |
| Peak forward surge current 10ms single half sine-wave superimposed at at T _J =150°C | IFSM | 150.0 | | | | Amps |
| Maximum instantaneous forward voltage per leg at: I _F =20A, I _F =5.0A, T _J =100°C | V _F | 1.15 0.85 | | | | Volts |
| Maximum DC reverse current at rated DC blocking voltage T _J =25°C T _J =100°C | I _R | 10.0 600.0 | | | | μA |
| Maximum reverse recovery time per leg (NOTE 1) | t _{rr} | 35.0 | | | | ns |
| Typical junction capacitance (NOTE 2) | C _J | 45.0 | | | | pF |
| Maximum thermal resistance per leg (NOTE 3) | R _{θJC} | 3.0 | | | | °C/W |
| Operating and storage temperature range | T _J , T _{STG} | -65 to +150 | | | | °C |

NOTES:

- (1) Reverse recovery test conditions: I_F=1A V_R=30V, di/dt=100A/μs, I_{rr}=10% I_{sm}
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (3) Thermal resistance from junction to case per leg mounted on heatsink

RATINGS AND CHARACTERISTIC CURVES BYVB32-50 THRU BYVB32-200

